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Supporting physicians caring for methadone users: the evaluation of the implementation of a Quebec program

by

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Abstract

Subject of study: *We evaluate the implementation of a Quebec program of support for professionals caring for methadone users (known as SAM: Services d'appui pour la méthadone). This program evaluation has two main objectives: to analyze the program implementation process and to assess the program dissemination and utilization (we focus on physicians).*

Methods: *First, three qualitative case studies have been used. Second, a survey was sent to all physicians prescribing methadone in Quebec (139 physicians), half of whom responded.*

Findings: *This study has highlighted the factors that have facilitated or inhibited the SAM implementation. In regard to the program dissemination, it appears that physicians do not know and use sufficiently the program. That said, most physicians find the support provided by the*

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program to be of great importance. Nevertheless, they do not make a commitment to increase their availability to methadone users. Improving access and continuity of methadone treatment raises complex issues.

Key words: *methadone treatment, treatment access, Quebec, support for health professionals, methadone-prescribing physicians, program implementation, program evaluation, vulnerable population, support, health professionals.*

Introduction

In the 1980s, harm reduction emerged as a preventive approach because of the advance of AIDS among drug addicts. Rather than abstinence at any price, the aim was to limit the detrimental effects of drug abuse (1).

Methadone maintenance treatment (MMT) is a widespread method of harm reduction: this medical intervention consists of treating individuals addicted to opiates (opium, heroin, etc.) with methadone allowing them to eliminate consumption of other opiates without experiencing withdraw symptoms. MMT has been intensively tested (2-9). A meta-analysis of 35 studies demonstrates a consistent, statistically significant relationship between MMT and the reduction of illicit opiate use, HIV risk behavior, and drug and property related criminal behavior (7). Even if continued illicit drug use by opioid dependant patients maintained on methadone is a serious problem, it seems that opiate abuse decreases significantly with time in treatment (3,6). The addition of basic counseling and other psychosocial services is also associated with major reductions in opiate use (2, 8, 10). On the whole, evidence shows that MMT is an effective treatment modality for opiate addicts, despite its side effects (11) (example: sleep disorders, sudation disorders, dependency), especially when it is integrated into a continuum of treatment services. Unfortunately, when the prevalence of drug injection is high, specialist services may be unable to meet need. So, allowing office-based general practitioners to prescribe methadone becomes an important issue (12-16). Decentralized treatment for injectors will not only expand access to the treatment, but also prevent the opiate addicts from being stigmatized (14), thereby improving observance of the treatment. The integration of medical and substance abuse treatment may also be cost-effective for the medically ill substance-abusing subpopulation (18). Research has clearly shown the feasibility of transferring stable methadone users to primary care settings (17-21). In fact, results show that treatment outcomes for such patients can be as satisfactory as for patients in specialist drug clinics (12,13). Successful programs are based on the

strength of collaboration between pharmacists and general practitioners, continuing education, and access to specialized services (13, 16, 21).
Like other Canadian provinces, including British Columbia (22) and Ontario (23, 24), Quebec (25) recently has made great efforts to improve access to MMT. Currently in Quebec only 10-15% of heroin users, compared to 50-60% in some European countries, have access to methadone treatment (25). A more efficient utilization of resources would increase access to care. The solution is then to involve more front line physicians in the care of stable methadone users, so that specialized centers can be devoted solely to the rest of clientele. To encourage front-line physicians to provide MMT to stable methadone users, Quebec offers them support services through a provincial program (known as SAM, the French acronym for Services d'appui pour la méthadone). In this paper, we report the findings of the assessment of that program.

The structure of this paper is as follows:
In the first section, we briefly describe the intervention, as planned and implemented.
In the second section, we present the study objectives, the framework for analysis, and the methods used in evaluating the project.
The third section summarizes the main findings of the assessment.
Finally, we conclude with some future issues.

The Intervention

The planned intervention

The SAM program grew out of the work of the provincial committee for the improvement of access to methadone. On the basis of the findings of a mini-survey of a sampling of methadone-prescribing physicians about their needs, the "Centre de recherche et d'aide aux narcomanes" (CRAN)[1], has been mandated by the Regional Health Board (the agency responsible of services organization in Quebec) to implement a program of support for all Quebec professionals caring for methadone users. In concrete terms, the program consists of:

- general information services (on substitution treatments, prescribing physician practices, the organization of services, availability of resources (pharmacies currently dispensing methadone in Québec), etc.), offered mainly through a phone help line and a website;
- consultation services (for medical, nursing and psycho-social follow-up). The requests are made to a network of experts;

[1] A center for research into and assistance for drug abusers, located in Montreal.

- referral-transfer services. Sam offers professional support for management of client transfers procedures, including short- and long-term transfers to other: programs, regions of Quebec, provinces of Canada, or countries. The patient transfer requests, submitted by professionals involved in MMT, are processed by CRAN, who centralizes the information on the availability of resources. Transfer forms and rules are standardized;
- organizing a yearly training initiative for all substitution treatment providers in Québec. A scientific committee, coordinated by Sam, is in charge of the program training.

This program has been financed by the regional health board.

The implemented intervention

A project coordinator, affiliated to CRAN, has been made responsible for Sam implementation. During all the duration of the project, he worked very closely with various stakeholders, either within working groups or informally. Later in the project (on March 2002), an advisory committee (composed of representatives of users, the regional treatment centers, professional orders, regional health authority, health department, and CRAN) has been set up. Its role is to contribute to the strategy development of SAM. In fact, this program has induced a broad partnership between these different players.

At the beginning of the program implementation, efforts have mainly focused on tools development, like web site design, conception of transfer forms, which specify the information needed for transferred patients. Representatives of different treatment centers were involved in this work. An important issue was also to dress the list of methadone prescribing physicians: the list given by the 'Collège des Médecins du Québec' had to be up-dated and "operationalized". So, all methadone-prescribing physicians were contacted in order to inform SAM about their availability for methadone users. Big efforts have been made also to dress the list of Quebec pharmacies currently dispensing methadone. Each pharmacy was asked for permission to distribute this list. The Quebec order of pharmacists has agreed to be involved in the updating of this register.
Beyond the improvement of coordination tools, SAM suggested new organizational collaborations. At the end of 2000, each Quebec region was assigned a consulting physician. In each treatment center, a pivotal intervening liaison between the party's organization and the rest of the network was also designated. Its role is to ease the patient's transfer, to update the information on the availability of medical resources in the

region. In Montreal, the services organization was quite different: three pivotal intervening parties were designated, since three major treatment centers shared responsibility for care of the methadone users. CRAN took responsibility for dealing with transfer requests associated with those three treatment centers, including requests for transfer to the community. The three methadone treatment centers were also intended to offer consultation services. Nevertheless, in fact, these services are mainly provided by the CRAN.

On October 5th, 2001, Sam was officially launched. This event has been extensively mediated. It is however important to mention that some of Sam's services, such as the training sessions, were offered as early as 1999. The phone help line was also accessible since fall 2000.

All the Quebec methadone-prescribing physicians have received a letter, signed by a much known methadone expert, informing them of the existence of the program.

Objectives of the study and assessment methods

Objectives

This study consists in an implementation analysis of the program. Its objective is to increase the external validity of the evaluative research and to identify the favorable conditions for generalization of the intervention (26, 27). More specifically, this implementation analysis:

- evaluates the influence of the organizational and professional context on the degree of implementation of the intervention.
- evaluates the degree of implementation of the intervention.

Concretely, our study has two main objectives:

- Objective 1: to analyze the program implementation process, particularly the barriers and facilitators of change.

- Objective 2: to assess program dissemination and utilization. In this study, we focused on methadone prescribing physicians because of the importance of their role, as a determinant of accessibility and continuity of MMT. The questions are:
  - Is the program known by methadone-prescribing physicians?
  - How do physicians view the SAM program?
  - What is the importance of the program according to the physicians?
  - What are the types of support needed by physicians?
  - To what extent do physicians use the program?

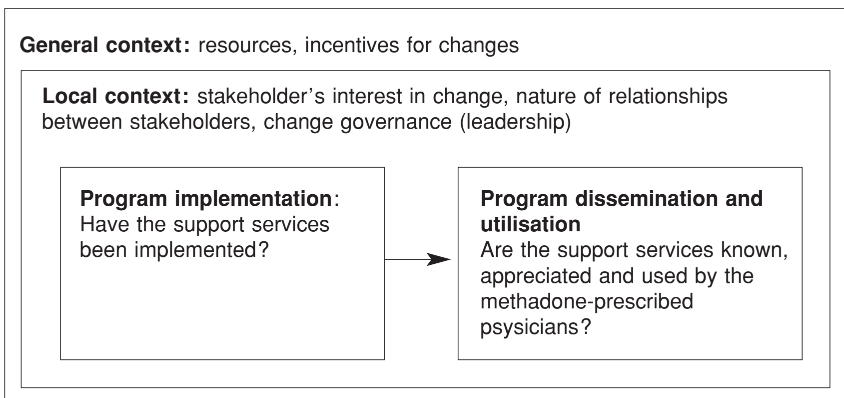
Framework for analysis

Our framework for the process analysis adopts two perspectives:

- a macro perspective, which is, related to the general context for implementing the program. This perspective takes into account the socio-economic background in which the program is developed (28). The context analysis refers notably to the availability of resources, which is deemed to be an important determinant of partnership development (29). The incentives, namely the financial incentives, for change constitute also a key interpretative variable (30);
- a micro perspective, which is related to the change process at the local level. Here, we are more interested in the stakeholders' interests in collaborating. As stated by Gray (31) and Bryson and Crosby (32), the identification of common problems and recognition of interdependence is necessary in any partnership-building project. Many studies put also much emphasis on the importance of trust as a facilitator of inter-organizational collaboration (33-35). Besides the nature of relationships between the actors, the change governance seems to be a crucial determinant of the process outcome. For instance, the role of leaders as the driving forces behind the process appears crucial [36]. In complex organizations, like healthcare organizations, leadership is larger than the actions of a single person. Leadership is thought as a distributive process shared by many people (37-40).

In short, we can schematize our framework for analysis as follows:

FIGURE 1
Framework for analysis



Methods

Two complementary methods have been used.

- A qualitative approach, addressing the first objective of our study. More precisely, three qualitative case studies linked to three program implementation contexts (i.e. regions in which treatment access problems are more or less acute) have been carried out. “Case studies are the preferred strategies when “how” or “why” questions are being posed, when investigator has little control over events, and when the focus is on a contemporary phenomenon within some real life context” (41). More precisely, we adopted an orientational qualitative inquiry (42) which considers “that nothing can be interpreted free of some perspective. So the first priority is to capture the perspective and elucidate the context of the people being studied” (43). Within this orientation, the focus of inquiry is largely determined by the framework within which the researcher operates. Of course, it is a question of degree: the researcher is also attentive to insights emerging from data. In short, our approach is deductive and inductive.

According to this research strategy, data sources are:

- 26 semi-structured interviews with: (a) CRAN’s senior staff, (b) SAM managers, (c) representatives of regulatory agencies and professional orders, (d) the pivotal intervening parties associated with the treatment centers, (e) consulting physicians, (f) methadone prescribing physicians (selected according to practice in an urban area or a region, place of practice, volume of activity),
  Some of these actors (a-e) were chosen because of their role in the program implementation. We have also included representatives of prescribing physicians (the target of the program), selected so that a variety of points of view is guaranteed. The interviews were pursued until saturation in data collection.
  We conducted the interviews between spring 2000 and winter 2001. These interviews, which were transcribed in entirety, aimed to collect information about stakeholders’ representations concerning the strengths and weaknesses of the “methadone network”, the SAM implementation process and the value of the program. The development of the interview guide is mainly based on our framework for analysis.
- Non-participative observation of program implementation meetings. Since we were not experts in methadone treatment, we preferred not to take part in discussions. Our observations were fully noted.

- Documentary analysis (minutes of meetings, agreements between institutions and so on).

  All the data collection, and the analysis have been done by the researcher, who is the author of this paper.
  The analysis of the qualitative data has consisted first in individual case analysis and second in cross case analysis. Concretely, the main steps of the content analysis of the data are (43): data coding, matrix data display, drawing conclusions founded upon the theoretical coherence. WeThe resea have triangulated the multiple sources of data (originating from multiple interviews, documentary sources, our observations) to reinforce the validity of our analysis (43). Finally, our interpretation of data has been validated by key informants, who have been closely involved in the implementation program (example, the project coordinator, the CRAN executive) or have played an important role as partner (example, the members of the advisory committee). The validation process consisted in a deep discussion of the study results (we provided a detailed report of these results). In conformity with a constructivist vision, we considered that our results are "valid" when a consensus about the interpretation of the results is achieved.

- A quantitative approach. The main objective of this quantitative method was to complete our understanding of the context of the implementation and to assess the program dissemination and utilization.
  To that end, a custom-designed survey addressed to all physicians prescribing methadone in Quebec was developed with the particular objective of evaluating the understanding of the program, the use of its services, and satisfaction with them. Through this survey, physicians were also questioned about the difficulties encountered in their work with methadone users, to have a more precise picture of the context of the implementation of the program. This survey has been conceived by the researcher, in collaboration with two Sam's professionals. Three experts have validated the content of this survey. It has been sent in March 2002, to all the methadone-prescribing physicians in Quebec, i.e. a total of 139 physicians, 50% of whom responded. According to our study objective, the analysis of the quantitative data is descriptive.

As we can see the two types of methods, qualitative and quantitative have been complementary: the issue is to build an integrated picture of the situation (42). For example, both methods give insights concerning the context of the program implementation. In fact, methods triangulation is considered to be a relevant strategy to enhance the validity of program evaluation (42).

Validity of the study

The validity of our study is grounded on several factors:

- the validity of the qualitative case studies is mainly based on the theoretical coherence of the findings. The adoption of some methodological measures, like the triangulation of data sources and the validation of the findings by key informants, also strengthens the validity of the study.
- the findings from the survey can also be considered as globally valid in terms of generalizing, knowing that our sample represents 50% of the entire population under investigation (all the physicians who are prescribing methadone in Quebec), unless there is some systematic bias in the responding to the survey.
- Finally, the methods triangulation is a key element of the study validation.

Findings

What are the barriers and facilitators of change?

As we have mentioned, the Sam program has succeeded in implementing the support services.
Mainly, three factors have favored this success.

A general consensus about the relevance of the program

The participation of different stakeholders (regional health board, professional associations, pivotal intervening liaisons in treatment centers, consultant physicians in regions, etc.) in the program implementation is certainly due to this consensus. All these stakeholders are convinced that a program like Sam, can help, dealing with the problems encountered by the methadone network. Interviews and survey analysis have highlighted multiple problems:

- Problems owing to the profile of the clientele: Most (85.07%) methadone-prescribing physicians in the sample believed that care of methadone users is more demanding. A drug dependency problem may be coupled with physical and mental health, social and behavioral problems.
- Problems linked to the nature of the treatment: The need to ensure that there is complete continuity in the treatment the user receives is a major constraint on methadone-prescribing physicians.
- The need to build consensus concerning standards of practice, to enhance continuity of care. The conditions under which the clientele

is given privileges (the privilege of bringing the medication home, frequency of urine tests, frequency of meetings with the clinical team, etc.) are not necessarily identical from one physician to the next, even between physicians on the same clinical team. There are also disparities between programs in regard to providing psychosocial follow-up along with methadone treatment.
- Problems due to a lack of resources: Urban areas, particularly, have difficulty meeting demand because of the scarcity of methadone-prescribing physicians in the community, which creates a real bottleneck in the system. Because of this access problem, it is to the interest of urban centers to help programs in regions providing services to the patients who can be transferred to these areas.

The support services offered by Sam (Information, consultation, and transfer services), as we can see, constitute a partial solution to these problems.

The importance of a leader the network trusts

In a highly regulated context in which the confidentiality of information is crucial (ex. list of prescribing physicians) and where the program is managed by an institution (CRAN), the trust placed in the skills and impartiality of the player in charge of the project is of great importance, particularly to ensure that the network's interests take precedence over those of the institution who manages the program. For instance, the fact that Montreal methadone treatment centers delegate the transfers' management to the CRAN reflects these trust relationships, knowing that the three centers are faced with the challenge of freeing up treatment places.

The importance of building collective leadership that brings together the key players in the network.

In implementing the project, the creation of an advisory committee was very favourable. According to the stakeholders, such a committee makes it possible to:
- raise awareness in the program of the various care contexts (detention environment, regions, etc.);
- ensure greater visibility for the project;
- involve all the network's players in the process of change;
- and last, but not least, coordinate the intervention of the various regulatory organizations. For example, it is important for the *College des Médecins du Québec* to take into consideration the objectives of SAM in its monitoring of methadone prescribers. The order of physicians

must convince physicians of the whys and wherefores of monitoring, so as to prevent it from being negatively perceived and therefore a factor in withdrawing from methadone programs.

Contrariwise, other factors have been barriers to change. Notably, the shortage of medical resources: as we will see, the relative under-utilization of consultation services, for instance, may reflect reluctance on the part of the physicians to seek the assistance of their colleagues for services that are more time-consuming (knowing their work load and the shortage of resources), even if they do believe the program is valuable. Some interviews suggest strongly this hypothesis.
The lack of incentives (physicians are not paid for consultation services) have also limited the physicians integration in the program. Indeed, as we have noted, for the time being, only CRAN-affiliated physicians are responsible for the provision of consultation services in Montreal. If the demand for theses services increases, the enrolment of the other Montreal institutions will become a big issue.

What are the main lessons concerning the dissemination and use of the program?

Before giving details concerning the program dissemination, it is important to specify the profile of the Quebec methadone-prescribing physicians. The analysis of the survey responses has underlined some interesting facts:

- 94% of the respondents are family physicians. They have on average 17 years of experience as physicians.
- 53.3 % of the respondents have a first line practice (private practice, family medicine clinic in hospitals, community health center)
- 86.66 practice in urban areas (sub-urban areas, urban areas, down town)
- Their prescribing permit is on average 6.04 years old.
- The respondents have on average 5.95 years' experience as methadone prescribing physicians.
- 91 % of the respondents have completed an accredited course on methadone.
- The average caseload is 25.18 "long term" users for physicians who treat patients in the context of a specialized center and 14.16 for the other physicians.

Is the program known by methadone-prescribing physicians?

The assessment of the program dissemination shows that, among the 69 physicians in the sample, 59 had heard about SAM.

The survey showed that only 5 out of 53 of the methadone-prescribing physicians who were aware of the SAM program had been informed through a mass communication strategy – through the media, the organization of an event to launch the program, and so on.
Most of the physicians have heard about Sam through more personalized measures: they have been informed by a colleague or during a training session.

How do methadone-prescribing physicians view the SAM program?

Forty-seven of those 59 methadone-prescribing physicians who said they knew about the program gave a definition of the program in their response to the survey. Thirteen of the definitions were relatively vague (for example, a support service) and, although thirty-one were more specific (they cited services), they were incomplete. In all, only three physicians were able to provide a full definition of the program.

What is the importance of the program according to the methadone-prescribing physicians?

A total of 31 of 52 survey respondents lent great importance to the support offered by the SAM program, and 15 gave it average importance. Hence, a majority of the respondents found the program valuable. However, this does not mean that those physicians are prepared to be more available for methadone users. Table I shows the response of the 57 prescribing physicians to the question "Through the support provided by the SAM program, would you be prepared to care for more methadone users?"

TABLE I
Inclination of physicians to increase their availability to methadone users (question asked: "Through the support provided by the SAM program, would you be prepared to care for more methadone users?"

	Definitely	Probably	Probably not	Definitely not
Frequency n (%)	4 (7.01)	16 (28.07)	23 (40.35)	14 (24.56)

What are the types of support needed by methadone-prescribing physicians?

Questioned about the importance they give the various types of support, methadone-prescribing physicians responded as shown in Table II.

TABLE II
Assessment by methadone-prescribing physicians of types of support (in %)

Type of support[1]	Very important	Important	Of little importance	Not important
Access to information	36.06 (22/61)	50.82 (31/61)	11.47 (7/61)	1.63 (1/61)
Access to consultation	36.66 (22/60)	46.66 (28/60)	13.33 (8/60)	3.33 (2/60)
Access to training	15 (9/60)	61.66 (37/60)	21.66 (13/60)	1.66 (1/60)
Tutoring	20 (12/60)	41.66 (25/60)	31.66 (19/60)	6.66 (4/60)
Access to psychosocial services	55 (33/60)	35 (21/60)	10 (6/60)	0
Access to nursing services	21.66 (13/60)	33.33 (20/60)	36.66 (22/60)	11.66 (7/60)
Improvement of remuneration	33.33 (20/60)	38.33 (23/60)	23.33 (14/60)	5 (3/60)

[1] The importance of improving access to specialized services could not be evaluated because too much data were lacking for that variable.

To what extent do methadone-prescribing physicians use the program?

Only 31.03% of the methadone-prescribing physicians who are aware of the program use it. These program users (n=18) made specific use of the following services .

TABLE III
Percentage who used the various program services

Type of service	Information	Consultation	Transfers
Percentage of users n (%)	12 (66.66)	7 (38.88)	10 (55.55)

Although the small number of the program users force us to be very careful in our interpretation, it is interesting to note that users are generally satisfied with the services provided under the program, as regards both their rapidity and quality. As an illustration, 75% of the program's information services users (n=12) said they were very satisfied, and 25% said they were relatively satisfied with the rapidity of the service that the program provided. Concerning, the quality of the service, 83.33% were very satisfied and 8.33% were relatively satisfied.

Conclusion and discussion

This study shows that methadone-prescribing physicians do not sufficiently know SAM. Program dissemination needs a more vigorous communication strategy. Mass communication strategies are not enough to reach physicians. It appears that more personalized methods (presentations to groups, personalized mailings) are more effective. The issue is to inform the physicians concerned about all services offered by SAM.

The under-utilization of SAM may be attributable to the newness of the program, but it is clearly not the whole story. Findings suggest that the context does not always promote the program dissemination.

The results of this study also demonstrate that the solution to the problem of access to methadone is far from easy. The survey responses indicate that the majority of prescribing physicians are undecided about their availability to methadone users, even with the help of SAM. This finding however, should be promising. The fact that so many are undecided indicates the possibility that these physicians might be persuaded to care for more methadone users. Maybe, methadone-prescribing physicians need more support, particularly by way of psychosocial follow up for methadone users. The question is then how to extend and co-ordinate the range of services needed by methadone users. This is a big issue, knowing that the various services are generally provided by professionals working in different settings, namely medical private clinics or public institutions: these organizations have to learn how to reinforce their collaboration.

Finally, improving the continuity of care, especially for patients who have to be transferred is certainly a big challenge for the Sam, and for the entire provincial methadone network. Further than solving the resources accessibility problem, there is a need to better harmonize the professional practices. Indeed, as this study has shown, clearly there is not yet a consensus on standards of practice. This differing understanding of the philosophy of harm reduction may result in diverse forms of care, which can compromise continuity of care.

Improving continuity of care through interdisciplinary collaboration is a complex issue for all vulnerable populations who need a variety of services (medical, psycho-social, etc.), even if the concerned professionals work in the same organization (44): as stressed by some authors like Sicotte et al. (44), it is important to initiate some administrative formalisation to enhance collaboration among different professions. The "efficacy of formalisation in this context is based on its capacity to offer an articulated and operative interdisciplinary framework that can generate a counteractive effect to the traditional professional framework. It

offers concrete rules that help align the work group beliefs with interdisciplinary values". In other respects, some empirical results (45) are illustrative of the importance of the quality of relationships between providers as a facilitator of collaboration: it is not only a matter of program structuring. In this regard, interagency approaches can constitute an alternative to the development of integrated teams. Finally, we have to remember that continuity of care is subordinate to the patient cooperation. Consequently, the continuity of care is not limited to a question of services organization and has to take into account the users preferences (46-47).

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