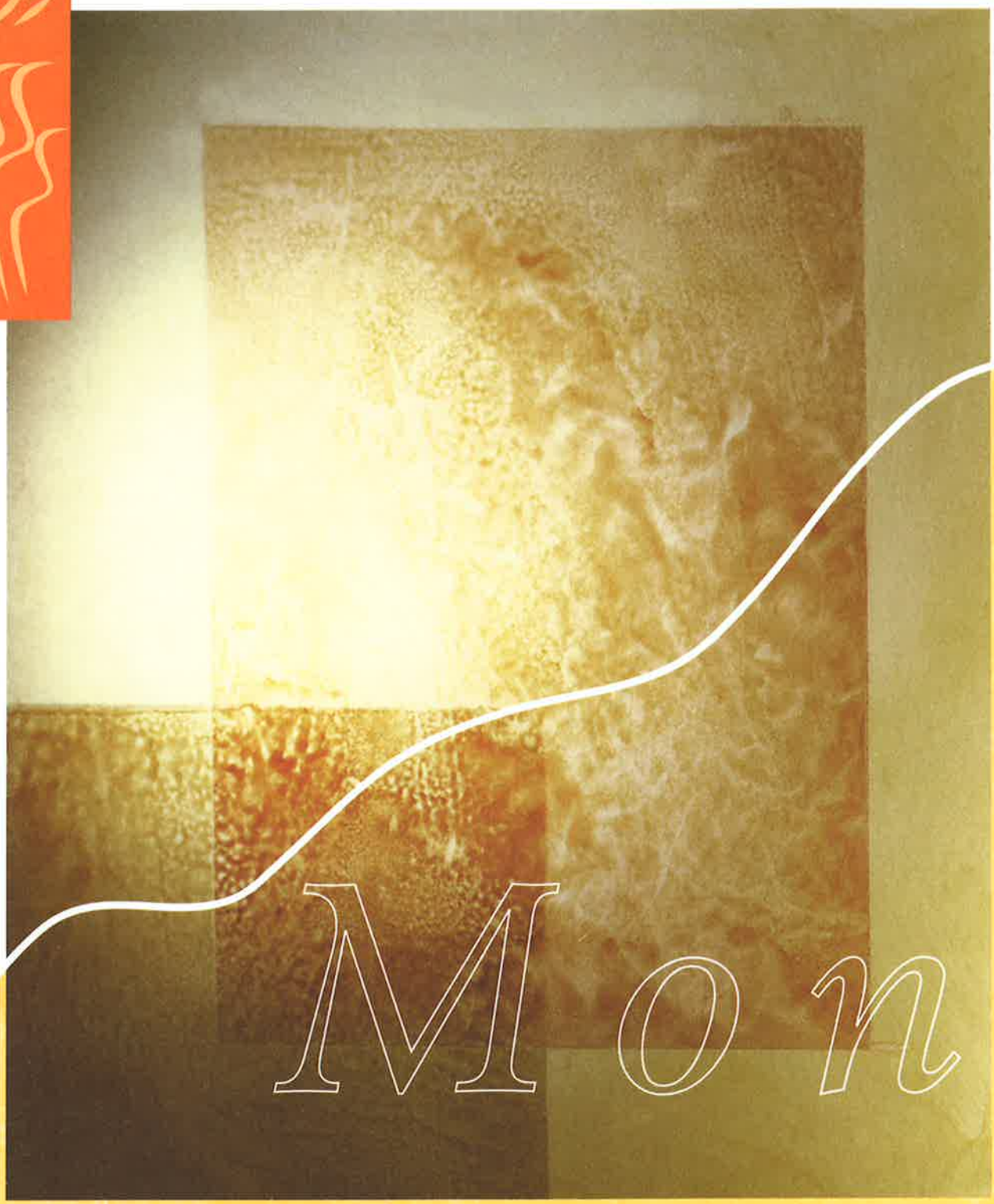

SUICIDE PREVENTION IN FINLAND 1986 - 1996

External evaluation by an international peer group

SOSIAALI- JA TERVEYSMINISTERIÖ

Monisteita **Copies 1999:2** **MINISTRY OF SOCIAL AFFAIRS AND HEALTH**

Ministry of Social Affairs and Health Copies 1999:2

SUICIDE PREVENTION IN FINLAND 1986 - 1996

External evaluation by an international peer group

MINISTRY OF SOCIAL AFFAIRS AND HEALTH

Helsinki 1999

ISSN 1236-200 X
ISBN 952-00-0569-2

MINISTRY OF SOCIAL AFFAIRS AND HEALTH

Foreword

Suicide has been, is and will be a major public health problem worldwide. In most cultures a stigma is attached to it. Stigma prevents or makes it difficult to approach the problem, to analyze it or to create and implement prevention methods.

In 1985 the Finnish Health Authorities decided to start a national suicide prevention project based on research. The ultimate aim was to lower the suicide rates by 20 % during the next ten year period. The research part of the project ought to increase understanding of the sociocultural, psychosocial and health related factors explaining the suicidal behaviour. The prevention component of the project ought to develope - based on research - prevention strategies and implement these on national and local level.

The Finnish National Suicide Prevention Project has now - as a project - come to its end. During the ten year period, the project has raised considerable interest also internationally.

The Project has now been evaluated both internally, and also by an international expert peer group. On behalf of the Ministry of Social Welfare and Health I like warmly to thank the international team of this evaluation report and hope that it will be for the benefit of all those interested to approach this important public health problem.

The members of the international evaluation peer group were: professor Jan Beskow, Sweden, chair, professor Ad Kerkhof, Netherlands, Senior Advisor Anita Kokkola, Finland, and professor Antti Uutela, Finland.

Helsinki, March 1999

Jarkko Eskola
Director General

Beskow J, Kerkhof A, Kokkola A, Uutela A.

SUICIDE PREVENTION IN FINLAND 1986 - 1996
External evaluation by an international peer group

For correspondence:
Professor Jan Beskow
Stigbergsliden 5
S-414 63 Göteborg
Sweden
Tel and fax 46-31-120362
e-mail jan.beskow.@online.idg.se

ABSTRACT

SUICIDE PREVENTION IN FINLAND 1986 - 1996
External evaluation by an international peer group
By Jan Beskow, Ad Kerkhof, Anita Kokkola and Antti Uutela.

The National Suicide Prevention Project in Finland consisted of a research phase (within the project from 1986-91 but still continuing), an implementation phase (1992-96) and an evaluation phase (1997- 98). A comprehensive internal evaluation was made by the implementation team focusing on the objectives, strategies, contents and results of the implementation.

The main goals for the external evaluation were to assess the purposefulness, appropriateness and results of the project and the usefulness of the project strategy in Finland and internationally. The research phase was to be evaluated only in so far as its usefulness for the intervention phase is concerned. In order to disseminate the information, the evaluation was expected to be published in an international scientific journal.

The Finnish suicide prevention project is the first research-based comprehensive national programme for suicide prevention in the world, implemented throughout the country and systematically evaluated internally and externally. It is therefore of utmost interest for all agents in the field.

The suicide frequency in Finland increased during the first years of the project to a peak in 1990, followed by a reduction of 20% between 1991 - 1996 during the implementation phase, and finally dropping to 9% below the initial level. The project may have contributed to the reversal of the increasing suicide rate.

The research was planned within a psychiatric-epidemiological paradigm and consisted of a nation-wide psychological autopsy study during one year (N=1397) engaging hundreds of active professionals. In addition to scientific results published later, it immediately stimulated a broad interest in suicide problems and many ideas for prevention. The research data were later also analysed from societal, social psychological and cultural perspectives. However there was a lack of data primarily collected from such perspectives and a lack of studies in the implementation methodology and evaluation.

The implementation covered broad public sectors all over the country. The work has clearly put the suicide problem on the societal agenda. In close co-operation with partners the implementation team has developed interactive models for health promotion and published many guidebooks which should be translated into other languages. The work has particularly influenced organisations and professionals in the service sector, though not the health sector as much as was initially suggested. Some groups were omitted, such as the elderly. The restriction of suicidal means was not addressed. The anchoring of the ideas in the administration of municipalities and in professional organisations was weak, which may threaten the survival of some of the project ideas.

Suicides should be seen as many-sided problems. Besides medical aspects, they can also be viewed from cultural, societal, psychosocial and linguistic aspects. Scientific studies of these aspects should be encouraged. The most important challenge for Finland now is therefore to organise all the interest and knowledge already created for the mutual task to carry through the next step in the Finnish prevention of suicide. The organisation for this purpose should be further strengthened in order that the differences between medical and other paradigms, still present after eleven years, could be understood and bridged.

In conclusion we state that the achievements of the project greatly outweigh its shortcomings. Through the evaluation we were convinced about the high quality of both inputs and outputs. We witnessed many indications of the significance of the project, both within suicide prevention as well as in the national health promotion activities. We think that international actors in the suicide prevention field have much to learn from the unique Finnish experience.

SUICIDE PREVENTION IN FINLAND 1986 - 1996
External evaluation by an international peer group

Over the last twenty years there has been a growing international consensus that suicides should be prevented (WHO 1985, Ramsay and Tanney 1996). The National Suicide Prevention Project in Finland, NSPP, 1986-96 is the first research-based comprehensive national programme for suicide prevention, implemented throughout the country and systematically evaluated internally and externally. The process and results of this large-scale experiment in suicide prevention is of utmost interest to all actors in the field.

Increasing levels of knowledge, international interdependence and economic problems have profoundly changed Finnish society during the period covered by the project. The government has transferred some of its power and responsibilities to the municipalities changing the pattern of governing from strict orders to action limits, to general guidelines and demands for mutual co-operation. The recession has restricted the economic frames for the Government as well as for municipalities, including the health sector. These societal changes may influence suicide rates and the conditions for suicide prevention.

Science, knowledge and values in the public health field have also changed. We have understood our task not so much to judge whether what was done was right or wrong in specific situations but to make an overall evaluation of the Finnish suicide prevention projects related to the general discussion about public health and suicide prevention.

Objectives

The main goal for the external evaluation set out by the Ministry of Social Affairs and Health was "to produce an overall estimation of the project as a societal action strategy, concentrating especially on its purposefulness, appropriateness and results. Furthermore, one aim is to evaluate the usefulness of the project strategy in Finland and internationally" (Eskola 1997).

The high level of abstraction indicated by *overall estimation* was further underlined by the wish of publishing the report in an international scientific journal. Looking at the project as *a societal action strategy* was further developed: "One of the project's tasks was to raise discussion about mental health issues in Finland and truly to integrate them as part of public health sector. Thus, the concept of health was applied, also, to suicide prevention. For one thing, this raised contradictory and artificial questions in hierarchy, authorisation, role and responsibility of university departments and public sector as different societal actors working partly on the same fields."

The evaluation group delineated from the above requests seven main questions to be answered later in this report.

Working procedure

During three 2-3 day meetings in Helsinki we designed the working procedure, listened to presentations of different parts of the project and discussed the final report. A questionnaire survey consisting of 62 fixed and 12 open-ended questions covering essential aspects of the aims, strategies and results was answered by a panel of 48 persons. We personally interviewed 32 persons representing workers within the programme as well as users and outsiders, including critics of the project. The interviews were summarised and the reports were read by the group members. The evaluation is also based on published articles and other reports, including the comprehensive internal evaluation, as well as on unpublished material. Reports in Finnish have been summarised in English by the two Finnish group members.

The internal evaluation was made by people who have worked in and for the project and it focused on the interaction with target groups. The members of the external evaluation group, on the other hand, have not worked within the project, and the project process is viewed also in relation to the development in Finnish society of prevention and mental health promotion as well as in relation to the international development of suicide prevention.

THE NATIONAL SUICIDE PREVENTION PROJECT IN FINLAND

The high suicide mortality in Finland, especially among young men (Lönnqvist 1988, Lönnqvist et al 1988), has been a focus of health policy discussion in Finland since the early 1970's. In 1985 the National Board of Health organised an expert seminar and formulated the first *directive goals* for the prevention (Hakanen & Upanne 1998):

"-To draw attention to this theme as a complex problem.
- To launch a development process in the entire country.
- To integrate the project into the public service system.
- To bring about activities that would affect especially health services."

The suicide prevention programme was included in the national health policy programme based on the European programme "Health for All by the Year 2000" (World Health Organisation 1985). The National Board of Health established a 20% reduction in national suicide mortality as an *effect goal* of this undertaking (Lönnqvist 1988).

RESEARCH PHASE (1986-91 in the project but has continued after that)

In the 1970's Professor N. Farberow trained a young generation of Finnish researchers in suicidology. Following this and other influences intensive research activity has been developed at the National Institute of Public Health. The aims of the project *Suicide in Finland* (Lönnqvist 1988) were:

1. "To give as complete and reliable a picture as possible of the suicide situation in Finland."

2. "To increase the understanding of health care, social welfare, and police of the nature of suicide, especially from the point of view of the interaction of the individual and his or her environment."

3. "To result in conclusions about the prevention of suicide at regional and national level, separate for each sector of society, in 1990."

4. "To result in conclusions about and recommendations for the functioning and qualitative level of health care and social welfare and other service organisations of society in 1990."

5. "To create conditions for a reliable and permanent suicide follow-up system at a regional and national level from the beginning of 1990."

6. "To initiate and to support suicide research."

The aims may be seen as process description through sub-goals. The *functional* aspects of the research are clearly marked. Goal No. 5 may also be interpreted as structural.

A preliminary picture of the suicide situation (1) in Finland was achieved by compiling regional statistical trends about suicide (Lönnqvist and al 1988). This picture was later differentiated through a comprehensive psychological autopsy study (6) of all suicides in Finland during one year (1st April 1987 to 31st March 1988; N=1397), "Suicide in Finland in 1987". This way of studying suicide through meeting survivors increased the understanding of the nature of suicide through *learning by doing* (2). Provincial project teams scrutinized the individual cases, which resulted in conclusions about and recommendations for the development of suicide prevention in different fields (3 and 4). Twelve monographs describing the research findings for each province of Finland had a strong regional and local impact and inspired to spontaneous preventive activities.

In the years 1988-97 this research activity produced 84 articles in well-reputed international journals with referee system, 45 in domestic language (Finnish or Swedish), 47 textbooks or chapters in textbooks (14 of them in international publications) and 27 theses. Most of the scientific work had a medical orientation but there were also many monographs with societal, social psychological and cultural perspectives. These works were mostly published in Finnish, however. The research work has been evaluated previously with good remarks (Åsberg et al 1996).

The successful and expanding research draws attention to the need for further mental health studies. An organisational frame for such studies was developed in the form of the Department of Mental Health at the National Public Health Institute, KTL.

IMPLEMENTATION PHASE (1992-96)

Up to June 1992 the work had revolved around an expert group, appointed by the National Board of Health/National Agency for Welfare and Health. Then the implementation activities, which had been planned during 1990-91, were separated from the research and directed through an administrative contract. The practical work was carried out by the National Research and Development Centre for Welfare and Health, STAKES, supported by a supervisory board. The project leader Maila Upanne had the operative responsibility. Financing was based on yearly grants. In the beginning only a couple of persons worked with the implementation. This was later increased, and on average the yearly team consisted of six person-years divided between both full-time and part-time employees. The implementation phase coincided exactly with the period of severe economic recession.

The research results and the recommendations from the regional experts as well as from other persons were content analysed, worked through in working seminars and used by an expert group in creating the National Target and Action Programme Strategy *Suicide can be prevented* (1992). The basic perspective was that a great variety of phenomena can exert cumulative burden on an individual's life, amounting to an insurmountable crisis expressed in suicidal acts. The programme structured the suicide preventive work through a common nomenclature and a theoretical frame.

Suicide prevention activities were summarised in a comprehensive model with three levels: specific prevention, non-specific prevention and enhancing the individual's inner resources and living conditions. The model suggests a broad action policy approach including support from close persons in daily life, responsibility and co-operation from various agencies as well as social policy measures. The programme thus indicated the place and responsibility of all concerned with life crises and mental health (Upanne et al 1998).

The objectives of the implementation phase (Hakanen et al 1996) were

- "to extend and transform into practice and models of action the targets defined in the national strategy". A prime goal was
- "to mobilize professionals in various service sectors throughout the country to develop focused, practical, and effective suicide prevention activities in their workplaces."

The project should thus be implemented in natural settings. The following principles were formulated:

- "Orientation towards the goal
- Nation-wide coverage
- Reaching the key parties
- Multisectorial and multiprofessional approach
- Focus on the operations
- Dependence on the setting
- Principles of co-operation - principle of working as a process."

The project team collaborated with at least 30 organisations and agencies and built a network of about 1100 strategically important contact persons. Mostly these persons worked within health care (40%) followed by social services and church with each 14% and police and rescue (10%). The team produced a magazine to inform the contact persons. Many lectures and workshops were also arranged.

The project team implemented nearly 40 development projects, table 1. These emerged sometimes from the *bottom* through initiatives from individuals or groups such as the school project, even if these activities had been inspired by the implementation process, or from the *top* after e.g. analyses of societal risk situations, as economic and the working problems during the recession, and risk groups such as suicide attempters.

In the subprojects a development consistent with the project ideas was achieved through co-operation in many different ways with local and sector representatives in analysing the situation and carrying through an action plan, ultimately leading to an operational model published in a guidebook (Upanne et al 1998).

The team developed a co-operative process model that was implemented under real-life cir-

cumstances in community-based settings. The work implied an enhancement of skills among the personnel, stressing the need of personal understanding in interaction. Traditional fact-oriented suicide awareness training was replaced by guiding and supporting a team through joint reflection over the possibilities of prevention, based on existing activities, responsibility of the professionals, their know-how, spontaneity and openness to learning-by-doing. Regional governmental authorities and local professionals contributed with motivation, local experience and practical work. The implementation team contributed with suicidological knowledge, ideas and enthusiasm. This was found to be rewarding and psychologically effective principles for development.

The project aiming at better care for suicide attempters was the only one concerned with specific risk factors. The other themes, such as the co-operation with the Defence Forces, were concerned with unspecific risk factors. Health promotive factors were present in for instance the school project, which developed a very much esteemed method for introducing strategies of dealing with crisis situations in the schools. The work book for journalists created in co-operation with the Journalists' Federation, the Department of Mass Communication at the University of Tampere, and individual journalists not only included aspects on how to report on suicides but also more generally stressed the responsibility of the media for a societal atmosphere that supports people to carry on.

The national depression programme "Keep your chin up!" was an independent spin-off project including co-operation with basic services, specialized services, services for children and adolescents, and directed towards the general population. An interesting phenomenological perspective is offered in the qualitative study "From depression to joy of life".

INTERNAL EVALUATION
(1997-1998)

The internal evaluation should give a description of the implementation phase and outline and evaluate it from a strategic point of view as well as its feasibility and effectiveness (Hakanen and Upanne 1996, Hakanen & Upanne 1998, Stufflebeam 1991). Other aims were to utilise the experiences in developing prevention strategies and project evaluations. More specifically the internal evaluation should also be used as material in the external evaluation.

The data collected during the work, guidebooks and other written documents were completed with a field survey (n= 1697) among the members of the network and the same number of persons outside the project.

EXTERNAL EVALUATION
(1998)

1. Have the original targets of the project been reached?
The first goal formulated by the National Board of Health "to draw attention to this theme as a complex problem" points out that suicide at that time was more or less absent from the societal arena. The project should launch a development in the whole country but focus on the public service system, especially the health care system. These general goals for the total project are purposeful and appropriate.

The general goal to draw attention in Finnish society to the complex suicide problem has been reached. The project has also succeeded in launching a development process in the

whole country, even if there are differences in penetrance between regions and sectors.

Realizing the complexity of the problem seems to have broadened the focus from specifically preventing suicide to a more general formulation: "How to handle the suicide problem in society". Suicide can now be discussed as problems similar to mental health, abuse and violence both on the societal arena and with individuals in trouble. This development has created a matter-of-fact base for the next developmental step.
The suicide project also has broken new ground for the global mental health field in Finland. One prominent example is the formation of the Mental Health Department at the National Public Health Institute, now Department of Mental Health and Alcohol Studies.

Effect goal. Suicide mortality per 100.000 inhabitants 15+ in Finland was somewhat lower in 1996 than in 1986, 29.9 compared with 32.9 (-9.1%). The rate however increased up to a peak of 37.5 in 1990 (+14.0%) before the start of the implementation phase. During that phase there was a gradual decrease to 33.5 in 1995 and a substantial drop in 1996 to 29.9 (-20.3%) compared to 1990.

These figures are hopeful but not conclusive concerning the intervention. The drop in 1996 may be a variation by chance but may also be a trend break. There may have been a number of factors influencing suicide rates such as economic recession, unemployment and a reduction in health care resources, but also better anti-depressants and increasing knowledge about depression and suicide. The influence of these separate factors is nearly impossible to disentangle. The suicide prevention project may have contributed to the decrease. So far it is satisfactory that Finland has seriously challenged the problem of suicide and that the trend at present is in the right direction. Preventive programmes may on some occasions have immediate effects but primarily they have a long-time influence on the total population.

An effect goal of 20% reduction in suicide rate may be useful in order to inspire to efforts. In fact, however, today we lack the appropriate knowledge to design such distinct goals. This goal reflects an unjustified deterministic view of the processes which impact on suicides.

2. Areas where the project has succeeded and produced useful information (strengths).
The research phase gave a valuable data base for the project. It has also contributed to suicidology with an impressive amount of detailed knowledge about suicidal processes. The results have confirmed many previous research findings on a more detailed and comprehensive level than before but have produced new insights as well. The reports have been accepted by high-impact international psychiatric journals. Those representing approaches other than medical have most often been published in Finnish.

Working with the psychological autopsy study "Suicide in Finland in 1987" brought about 450 professionals and local experts in intimate contact with suicide problems. This and the publication of national and regional data were efficient tools to evoke interest and willingness in individuals and organisations to engage themselves in suicide prevention. Successively the data broadened the view from a psychiatric-epidemiological to a more comprehensive one. The suggestions to preventive measures derived from the basic research material were directly used for the planning and carrying through of the implementation. The high prestige of medical research gave authority to the whole project.

The implementation team has succeeded in engaging broad sectors of professionals in suicide preventive activities and has worked out functioning participating methods. It has co-operated with partners in nearly 40 subprojects. Some of the most important are presented in table 1. The table shows a broad variation in approaches and working methods. Ideally the work con-

sisted of a joint production and testing of a convenient model for suicide prevention in the actual field. The co-operative process model of joint reflection on preventive possibilities starting with existing activities and the professionals know-how and willingness to learn-by-doing is highly recommendable. The field survey in the internal evaluation as well as our own interviews and survey show that key persons and gate-keepers have to a great extent embraced the model and action plan presented in "Suicide can be prevented".

We especially appreciate the production of a wide array of practical guidebooks targeting different vulnerable situations in which suicidal thoughts may arouse and the activities "front-line helpers" can undertake. These should be translated into other languages to be used as models and training aids. Through these activities the team has introduced a well-informed discussion in many fields, as well as possible ways to attack suicide preventive problems.

Nationally the intervention project has changed the outlook of experts involved in health promotion – many of them have mentioned that they have learnt much that is useful for interventions in other fields, too. Internationally, the project has been presented at numerous conferences and inspired other nations in their suicide preventive work.

3. Areas where the project has failed (weaknesses).

Besides many advantages the creation of a complete and reliable picture of the Finnish suicide situation from a psychiatric-epidemiological perspective also had its limitations. Data to control intervening factors such as the changing economic situation and reduction in psychiatric hospital resources were e.g. not collected, thus limiting the final analysis.

The time necessary to complete the research findings was underestimated. The transformation of primary data and impressions into preventive strategies could be used in planning the implementation phase, but virtual research results could be used only later in the process. With a longer gap between research and implementation on the other hand, much valuable time had been lost.

No scientific approach to the implementation phase was included in the research plans. This phase was thus not scientifically grounded but seen as a practical matter - learning-by-doing. Ideally, the evaluation should also have been planned more thoroughly from the beginning. Our external evaluation is thus retrospective with the limitations of such a design. The frequencies of suicidal thoughts and attempts as well as measurement of skills and attitudes had been possible measurable criteria. The early nomination of an external evaluation group could have facilitated the planning. To plan an evaluation of a controversial public health programme developing itself in interaction with many different self-acting systems however may involve risks to disturb a sensitive process. To begin with it is also a question of priority. The evaluation process is by nature a description and analysis of acts and events on a theoretical level, a process of increasing awareness, which needs some perspective.

Despite the concentration of the implementation on the service sector there were some shortcomings such as the absence of subprojects targeting the elderly. Neither was there an elaboration of the possibility for suicide prevention through restricting the availability to suicide means. Health professionals were the largest group in the network and performed many activities indicating an interest for suicide prevention. On the other hand there were only a couple of projects in this sector that were initiated by the implementation team. The project ideas could have been better integrated in the health care system. Neither were the professional organisations, e.g. for psychiatrists and psychologists, sincerely committed. Admittedly it is not possible to do everything. Nevertheless, these points to some extent weaken the excellent overall view about the implementation phase that we otherwise share. Furthermore, the inter-

views gave the impression that the research sector only in a limited respect is intended to use the experiences of the implementation phase in planning new research.

We have understood that the above problems partly reflect differences in perspectives between medical and other relevant paradigms. This underlines the understanding that conflicting perspectives are common in projects and that conflict solution is a creative part of the work. For suicide prevention it is of utmost importance that these paradigmatic differences can be understood and bridged. This requires close co-operation between different disciplines both at the university, at the practical level and between them.

The conscious concentration on the public service sector involved less focus both on the population and on the administrative level. A better anchoring among politicians and top administrators in the municipalities and in professional organisations might have increased the probability for a further life of the ideas also after the project has finished.

4. Have the resources for the project (personnel, funds) been sufficient and effectively used?

The human resources gathered in the implementation team seem to have been well chosen and to have promoted an appropriate use of economic resources. Continuity is necessary in elaborating such a new perspective on a controversial human problem. Much of the costs have been paid by other organisations, such as research funds and co-operating partners. The economy of such a project should however not be calculated on a one-year basis but for longer periods of time, if possible for the whole project. Otherwise non-productive and energy-consuming uncertainty hampers the planning and knowledge accumulation.

5. Has there been formed a public image of the project that either benefits or hampers suicide prevention?

No information about awareness of or attitudes to suicides among the general population exists either prior to or after the intervention. The question cannot be answered conclusively. However, there is some evidence bearing on this in the interview data.

The inquiries and interviews included in the internal as well as in this external evaluation mirror a convincing positive attitude to the project among professionals. Many concrete changes were described, indicating an increased openness to suicide problems. Some criticism is however delivered against the scientific bases for some of the interventions and against the broad approach, arguing for more focused interventions, especially against depression and abuse.

According to the interviews the media also now treat problems of depression and suicide in a more informed manner than previously, suggesting both changed attitudes among journalists and forthcoming long-term influences on the general population.

6. What could be learned from the project when considering similar nation-wide development programmes elsewhere?

Suicide and suicide prevention must sensitively be viewed as a part of the country's cultural situation. A rapidly changing society sets challenges to our awareness and knowledge of its state. Evaluations like this may be seen as instruments contributing to that end. Successful projects do not consist of articles and books but of interpersonal communication with the aim to develop individual and organisational resources. Lectures intended to increase theoretical awareness must therefore be completed with personal contacts based on an understanding of human interaction. The scientific knowledge about implementation processes must be further developed. In planning there should be a careful balance between stability and flexibility. Economic resources and evaluation should be planned from the beginning of the project.

7. In continuation, which are the most important questions to be considered in suicide prevention?

Suicidal problems as a cultural issue. The on-going development to overcome primitive and irrational fear of suicide and replace it with a more matter-of-fact attitude is an important step forward, which influences not only suicide prevention but attitudes to life and death in general. Still, few messages have such a strong impact on other people than suicidal behaviour. The suicidal process is a drama playing within an individual but using arguments and codes from contemporary and previous society. Suicidal behaviour is thus at the same time an individual, social and cultural problem. A sustainable lowering of suicide frequencies probably requires an understanding of the role of suicide in the construction of cultural values. Cultural studies in a broad sense, concerning e.g. history, religion and language, may enhance our understanding of the suicidal individual both as a cultural product and as a deviant from cultural norms (cf. Secker 1998). Such studies should be encouraged.

How does a depressed and suicidal person think and feel? A deeper knowledge of the phenomenology of depression and suicidal behaviour can be acquired through qualitative studies. Such a study has started in the *Keep your chin up* project under the title "From depression to joy of life" analysing depressive feelings as lived experience of depressed persons. It is necessary to look behind the symptom level and understand the cognitive processes behind depression. Such knowledge facilitates both the co-operation with the ill person and psychotherapeutic interventions.

Full use of the progresses in studies of the central nervous system. New methods suggest that in the coming years we will probably much better understand the neurological base of emotions and cognitions and their role for the development of depression and suicidal tendencies. This development can be promoted by a better understanding of the phenomenology of depression and suicide. Converging perspectives between medical and psychological research have in many research groups transformed previous tensions to close co-operation and mutual understanding.

Combating mental disorders and abuse. Understanding suicide problems is to understand the seriousness of mental health problems and the need to understand and meet human needs more efficiently than today. Increased knowledge about the central nervous system will probably result in even more efficient remedies against mental disorders and abuse.

Under circumstances of economic scarcity a better use of human resources by professionals, patients and survivors may increase efficiency and counteract damaging effects. This includes an increased consciousness about possible gains through a more effective professional interaction. This may be learned and practised in close co-operation between the health sectors and other sectors in the municipalities, as well as between different health professionals (psychiatrists, general practitioners, psychologists, nurses etc.), in order to develop a care continuity with the patient as the primary responsible agent. Increased knowledge and self-efficiency may also be promoted through dissemination of knowledge to grown-ups and through training in the schools.

Monitoring suicidal behaviour. Such a broad design on psychological autopsies as "Suicide in Finland 1987" is no longer necessary in Western cultures from a purely scientific perspective. More intensive studies on selected groups using both qualitative and quantitative research methods are still needed, though. In other cultures broader studies may still be useful, especially because of their capacity to evoke interest among professionals and municipalities, to promote suicide prevention programmes and diminish irrational fear.

A continuous follow-up of suicide frequencies on a local, regional and national level is necessary to withhold the interest in suicide prevention. The WHO/EURO multicenter project on suicide attempts must also be followed up through measuring the frequencies of suicide attempts, both those who are admitted to hospitals (registration) and those who are not (inquiries). The relationships between population figures measuring suicidal thoughts, suicide attempts and suicides is probably a fruitful way to understand suicidality from a societal perspective (Kerkhof et al 1998).

The restriction of availability to suicidal means. To increase people's awareness and knowledge is a never-ending task. The search for more technical solutions, such as creating non-toxic medicines for depressed persons, is a possible way to prevent suicides, which has to be more developed in the future. Control of the availability of toxic substances, detoxification of car emission or sensitizers automatically switching off the motor at dangerously high carbon monoxide levels, injury prevention in underground railways and gun possession control may thus have a substantial, even if time-limited, effect on suicide rates (Goldney 1998).

Further development of suicide prevention in Finland. The project needs continuity in support, first to guarantee the immediate survival of some of the subprojects but later to design appropriate intervention models in new situations and from new perspectives. The most important challenge for Finland now is therefore to organise all the interest and knowledge already created for the mutual task to carry through the next step in suicide prevention.

CONCLUSIONS

The general idea of the National Suicide Prevention Project in Finland has been to launch a development of suicide prevention in the entire country through a research based programme implemented in the public service sector. The project was carried through in a rapidly changing society, which during the project time transformed the conditions for suicidal acts as well as for suicide prevention.

The research within a psychiatric-epidemiological paradigm gave authority to the enterprise, brought hundreds of professionals into fresh contact with the suicide problem and produced results of general scientific importance as well as interesting regional data. All this effectively stimulated engagement in suicide prevention. The chosen focus however had a limited scope for collecting data appropriate to other theoretical approaches, as well as for research concerning implementation methodology and evaluation.

The implementation was successful in putting suicide prevention on the societal agenda and at large in promoting development in the chosen areas. It may already have contributed to the reversal of the increasing trend in suicide rates. It gave experiences of an interactive participating working model and produced practical models and guidebooks for suicide preventive work. In these respects the project has been both purposeful and appropriate and has produced good results. However, the influence on the health sector was less than initially suggested. The anchoring of the project ideas in municipalities and professional organisations was also week, which may threaten the survival of some of the subprojects.

The project now needs a continuity in support in the near future to guarantee the survival of some of the subprojects, but later presumably configured in new ways and from new perspectives. The organisation for this purpose should be further strengthened in order that the differences between medical and other paradigms, still present after eleven years of good intentions, could be understood and reduced.

In conclusion, we state that the Finnish suicide preventive project in general has been a successful one. The achievements of the project greatly outweigh its shortcomings. Through the evaluation we were convinced about the high quality of both inputs and outputs. We witnessed many indications of the significance of the project, both within suicide prevention and in the national health promotion activities. The project has already been a rich source of inspiration for other national and international health promotion activities. Lessons from the project should be seriously studied by actors interested in suicide prevention in any cultural setting.

REFERENCES

Eskola J. Invitation letter concerning "The first working meeting of the evaluation group for Finland's national suicide prevention project", Helsinki 30 December 1997.

Hakanen J, Upanne M. Evaluation strategy for Finland's suicide prevention project. Crisis 1996;27(4):167-174.

Kerkhof A, Clark D. How to evaluate national suicide programs? (editorial). Crisis 1998;19(1):2-3.

Goldney RD. The IASP Adelaide declaration on suicide prevention (editorial). Crisis 1998;19(2):50-51.

Lönnqvist J. Suicide in Helsinki. An epidemiological and social-psychiatric study of suicides in Helsinki in 1960-61 and 1970-71. 1977: Meder-Offset Espoo.

Lönnqvist J. National suicide prevention project in Finland. A research phase of the project. Psychiatria Fennica 1988;19:125-312.

Lönnqvist J, Louhivuori K, Palonen K, Tuomaala A. Suicide mortality in Finland. Psychiatria Fennica 1988;19:133-42.

Lönnqvist J, Henriksson M, Isometsä E, Marttunen M, Heikkinen M, Aro H, Kuoppasalmi K. Mental disorders and suicide prevention. Psychiatry and Clinical Neurosciences 1995;49, Suppl 1, 111-116.

National public health institute, IMS –87, 19.5.1987. Research instructions for the interviews in the "Suicide in Finland 1987" project.

National research and development center for welfare and health, Stakes. Suicide can be prevented. A target and action strategy for suicide prevention, Helsinki 1993.

Ramsay RF, Tanney BL (eds). Global trends in suicide prevention. Toward the development of national strategies for suicide prevention. Tata Institute of Social Sciences, Mumbai, 1996.

Secker J. Current conceptualizations of mental health and mental health promotion. Health education research 1998;13(1):57-66.

Stufflebeam DL. The CIPP model for program evaluation. In Madaus GF, Scriven MS, Stufflebeam DL. Evaluation models. Viewpoints on educational and human services evaluation. Kluwer-Nijhoff Publ., The Hague 1991.

Taylor SJ, Kingdom D, Jenkins R. How are nations trying to prevent suicide? An analysis of national suicide prevention strategies. Acta Psychiatr Scand 1997;95:457-463.
Upanne M, Hakanen J, Rautava M. Finland's suicide prevention project. Internal evaluation. National research and development centre for welfare and health. Manuscript. Stakes, 1998.

World Health Organisation. Targets for Health for all. 1985: Copenhagen, WHO.

Åsberg M, Cooper J, Paykel E, Vaglum P. Psychiatric Research in Finland in 1995. A peer review report for the Adacemy of Finland.

Table 1. Characteristics of some subprojects

	Top/ Bottom	Full group population	Subpop./ Exper. Group	Resources from the organis.
Regional planning	T	-	+	+
Church	T+B	+	-	+
School	B	-	+	+
Defence forces	T	+	-	+
Police	T	-	-	+
Dept coun-cellors	T	-	-	-
Children in crisis	B	-	+	+
Youth coping strategies	B	-	-	-
Occupational alcoholic care	T	-	+	+
Suicide attempters	B	-	+	+
Survivors	B	-	+	-
Mass media	T	+	-	+

	Guidebooks	Workshops	Network	Hope of expected continuation
Regional planning	+	+	+	?
Church	+	+	-	+
School	+	+	-	+
Defensive forces	+	+	-	+
Police	-	+	-	-
Dept councellors	+	+	-	-
Children in crisis	+	+	+	+
Youth coping strategies	-	+	-	-
Occupational health care	+	+	+	+
Suicide attempters	+	+	+	+
Survivors	-	-	-	+
Mass media	+	+	-	?