

FIELD STUDY REPORT

Evaluation of the Client Oriented Monitoring Tool (self-evaluation method) In Semnan Urban Health Centers

Ministry of Health and Medical Education
And
UNICEF IRAN

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In the Name of the Almighty

Dear Colleague,

What is being presented to you here, under the title of **"Field Study Report on the Basis of Self-Evaluation Method"** is actually a formulation of the thoughts arising from the results of previous programmes. In a way, it is a milestone and a link in a chain that is a guiding star which calls for the help and succour of those involved in this project, to traverse the road to its perfection.

No doubt, what the executors of this project have presented for the operation of the project, including the **Preliminary Report** consisting of the stages of evolution of the **Basis of the Self-Evaluation Method**, as well as, two Educational Articles for the **Execution of Self-Evaluation**, and a **Guide for Co-ordinators for Carrying out Self-Evaluation**, do have some shortcomings. However, experimenting with new experiences based on logic is worthwhile, because we firmly believe that all those who care for the hygiene and health of our country, will guide us in:

**"Formulating a Wider Outlook",
"More Logical Thinking" and
"Acting More Correctly".**

**Executorial Group
February 2001**

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No doubt, even after years of study and research on theoretical texts, attaining what could in practice be obtained, is well nigh impossible. This was made possible for us under the auspices of the co-operation of our colleagues in the Semnan Provincial and Urban Hygiene/Health Complex. This calls for our deep thanks and appreciation. Also, it is necessary to proffer special thanks to our colleagues at the Hazrat Roqayyeh Hygiene/Health Centre, Semnan, who were hosts to the earliest of this project.

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- Centre for the Expansion and Development of the Management of Hygiene and Health Services affiliated to the Ministry of Health
- UNICEF Office in Tehran
- Department General of the Family Health affiliated to the Ministry of Health

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PREFACE

Preface

The following text is a field study of a monitoring method called “Self Evaluation”. In this monitoring method the service providers at the health center (by looking at the service quality, based on client perception), evaluate their services in a group fashion. This evaluation then leads towards monitoring the services of the center, and helps to continuously improve the quality of service provision by the center.

The detailed guidelines on the execution of the “self evaluation method” have been published in two separate educational texts, one targeting the staff of the health centers, and the second one for the people in charge of co-ordinating the “self evaluation” at these centers. These guidelines are annexes of the three-day educational programmes organized for each center.

The soul of this kind of monitoring method is the attention paid to the quality of service provision. The characteristics of this method are mentioned in the text review section. It is worth noting that the implementation of this monitoring method is based on the Client Oriented Provider Efficient (COPE), which has been executed in more than 20 countries around the world. However, this program differs from the original COPE program in two ways:

1. The COPE experience in various countries has been limited to *Family Planning* services. In contrast, the main part of “self evaluation” is focused on an analysis of the quality measures of the Maternal Care, which has been applied for the *first time* in the world. The main differences between these two programs (Maternal care and Family planning) are the relative complexity of analyzing the Maternal health care services. In fact, this program is a complete sample of integrating various services aimed at the prevention (primary and secondary prevention) of various problems (such as Iron deficiency anemia, Eclampsia, Diabetes, etc, during pregnancy, maternal and infant mortality etc). Usually, other services do not entail this level of complexity (Integration). As a result, the executional group thinks that in case of applicability of “self evaluation” for maternal care (through enlightening it’s methodology), other programs can easily adapt this kind of monitoring system.
2. Implementing any new initiatives, especially those aimed at the promotion of quality, need their acceptance by managers, staff and the people. In the developing stages of the “self evaluation” method, we have tried to gain the collaboration of all people who have any kind of role to play in the execution of this program, to adopt a domestic method, inline with the organizational characteristics and culture of our country. In other words, selection of Maternal care (instead of family planning) has led us to pay greater attention to the spirit of quality care in the creation of this kind of “self evaluation” and design the instruments to be inline with the structures, beliefs, etc, of the Iranian people¹. So, instead of the usual import or translation of the program, we tried to understand the basics, and produce an ***Iranian*** version of the program.

Due to the importance of documenting the theoretical basis, and the development of the “self evaluation” method, a comprehensive progress report was printed in a separate booklet in July 2000. The following text is designed to

¹ One of the changes regarding the interviews with the clients was that, in line with the conditions of service provision in Iran, instead of analyzing the client satisfaction on a quantitative basis, we focused on dissatisfaction of the clients, and analyzed it in a qualitative manner.

show the results of analyzing the applicability of this method, with the goal, to show the changes made to the context and execution method of “self evaluation” based on functional experiences. However, according to the importance of the theoretical basis of “self evaluation” and the method for analyzing its applicability, at first, part of the text analysis is presented, and then. we proceed with the experiences gained through the field study.

Abstract

The basis of the developed client oriented monitoring tool is "Self-Evaluation". It is a method enabling staff of each center to monitor their own activities with an "Attitude Based on Client View". The main spirit of this monitoring method is paying attention to a "quality service" with the following specifications: "Client Participation, Staff Participation,

Appreciation of Innovations, Appropriate Leadership, Evaluation of the Activities, and, Crisis Management".

The general goal of the field study has been the finalization of issues and implementation method of "Self-Evaluation" and studying its effectiveness. The effectiveness of the "Self-Evaluation" has been assessed based on the study of applicability, learning orientation, comparing the monitoring role of this method with regular supervision and its effect on working condition in the center, and knowledge and satisfaction of the clients.

Working Method: Finalization of issues and implementation method of "self evaluation" had been done in one of the urban health centers of Semnan township. The results of this experience have been reflected in two books under the titles of: "Educational Text of Monitoring by Self Evaluation Method in Urban Health Centers" and "Guide Book for the Co-ordinators for Execution of Monitoring by Self Evaluation in Urban Health Centers" which make extension of "self evaluation" to other areas.

In order to assess the effectiveness of "self evaluation", the baseline data were collected from urban health centers of Semnan district, and then, by random sampling centers were classified into two groups of intervention "self evaluation training" and "regular supervision". After completion of the first session of "self evaluation", the "post intervention data" were collected from the health centers, to be compared with each other. The base for analysis of the goals of learning orientation and applicability were the staff of the intervention centers, and, for analysis of other goals, they were the difference of the data collected after the education and "self evaluation" execution intervention with the basic data.

Results: 86.5% and 100% of the staff of three intervention centers and one pilot center, respectively, stressed that they would encourage their colleagues in other centers to undergo the "self evaluation". They mentioned the monitoring role, improvement of inter-staff relations, and promotion of the incentive, as strong points of "self evaluation".

Meanwhile, the weak points expressed regarding this monitoring method were mainly about the execution in the intervention centers (which on average had passed 20 days of the training), and, in the pilot center (after passing 80 day so of the training), they stressed the lack of co-ordination with higher levels, and the possibility of discouragement in cases where the network would not respond to the referred cases.

Comparison of the monitoring role of "self evaluation" and regular supervision shows that "self evaluation" does not face the supervision problems such as superficiality and the extent of the revealed problems. Due to the manner of its execution, it can be continuous. In contrast, the average duration between two regular supervision was four months. "Self evaluation" has increased general job satisfaction of the staff ($P=0.04$), and satisfaction from other colleagues ($P=0.06$); and has improved their attitude towards their relations with their colleagues ($P=0.06$). However, "self evaluation" has not shown a meaningful

difference in the attitudes towards management, and the practice of the centers.

Discussion and Recommendations: Although, due to the short span of time from the start of the training, and lack of sufficient time, we were not expecting any changes in the attitude and practice of the staff of the intervention centers, in practice it was observed that when compared with the centers, changes in line with "quality service" had taken place. The results obtained bear out that it is possible to adapt "self evaluation" according to the service provision conditions. It is therefore recommended to act on the following lines:

Strengthening program monitoring and evaluation on other levels of the health system, by utilizing the attitude obtained from "self evaluation in urban health centers".

Extending self evaluation to other services of the health centers, including, child care, growth monitoring, vaccination, family planning etc.

Evolving the "self evaluation" method, for example, by using public participation, and integrating it with smoothing the supervision.

Continuation of field study in a way that complete evaluation of the variables, and especially, mid and final outcomes (such as coverage of target group, continuation of service provision and client health) would be analyzed.

Considering "quality with a client based attitude" on defining standards for health service programs.

Field Study

Introduction:

The objectives of the field study can be summarized in two categories:

- 1st) Finalization of the instruments and how to proceed with the "self-evaluation".
- 2nd) Analyzing the effectiveness of this monitoring method.

In order to achieve the first objective, two actions were taken. In the first phase, two general meetings were held during August 13,2000 and August 17,2000.

The participants included all the family health managers and experts of the townships and the province of Semnan.

The first meeting was organized in order to introduce the plan to the participants, and to attract their commitment to implement it. During the second meeting, the goals of each of the "self evaluation" instruments, and the content of their guidelines were discussed and analyzed. In the course of this meeting, some changes were made in the instrument goals and contents, to suit the conditions in the Semnan province.

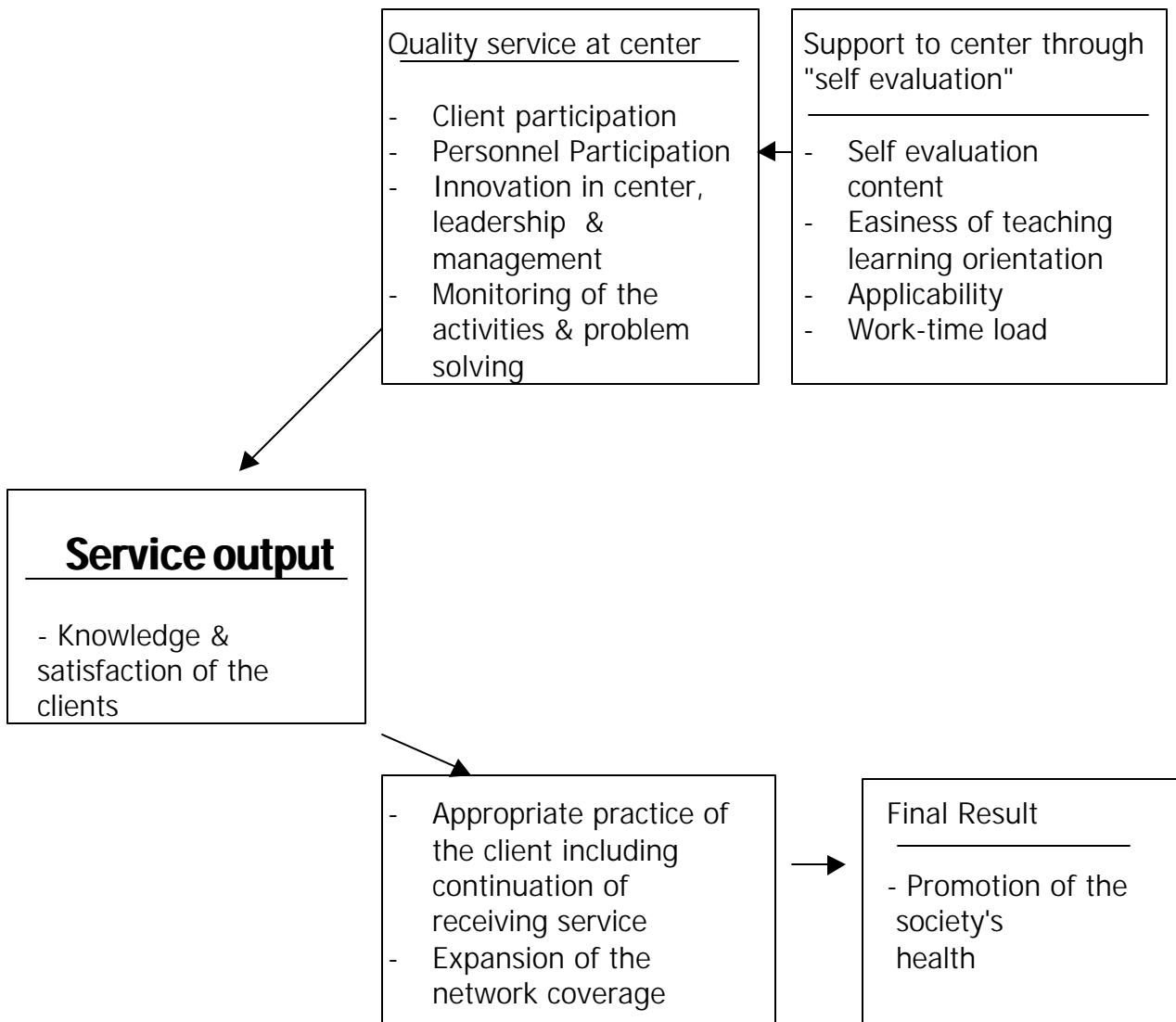
The majority of these changes were made in the service analysis guidelines of interviewing the clients.

In the next step, with the approval of the provincial and township officials, Hazrat Roghyeh Health Center of the Semnan city was selected as the pilot center.

The above officials were of the opinion that this Center is an average center in terms of management methods, personnel status and clients, and, as a result, could be considered an appropriate place for finalization of the instruments, "self evaluation" implementation methods, and training of township co-ordinators. In other words, the results of this study would be capable of being extended to other centers.

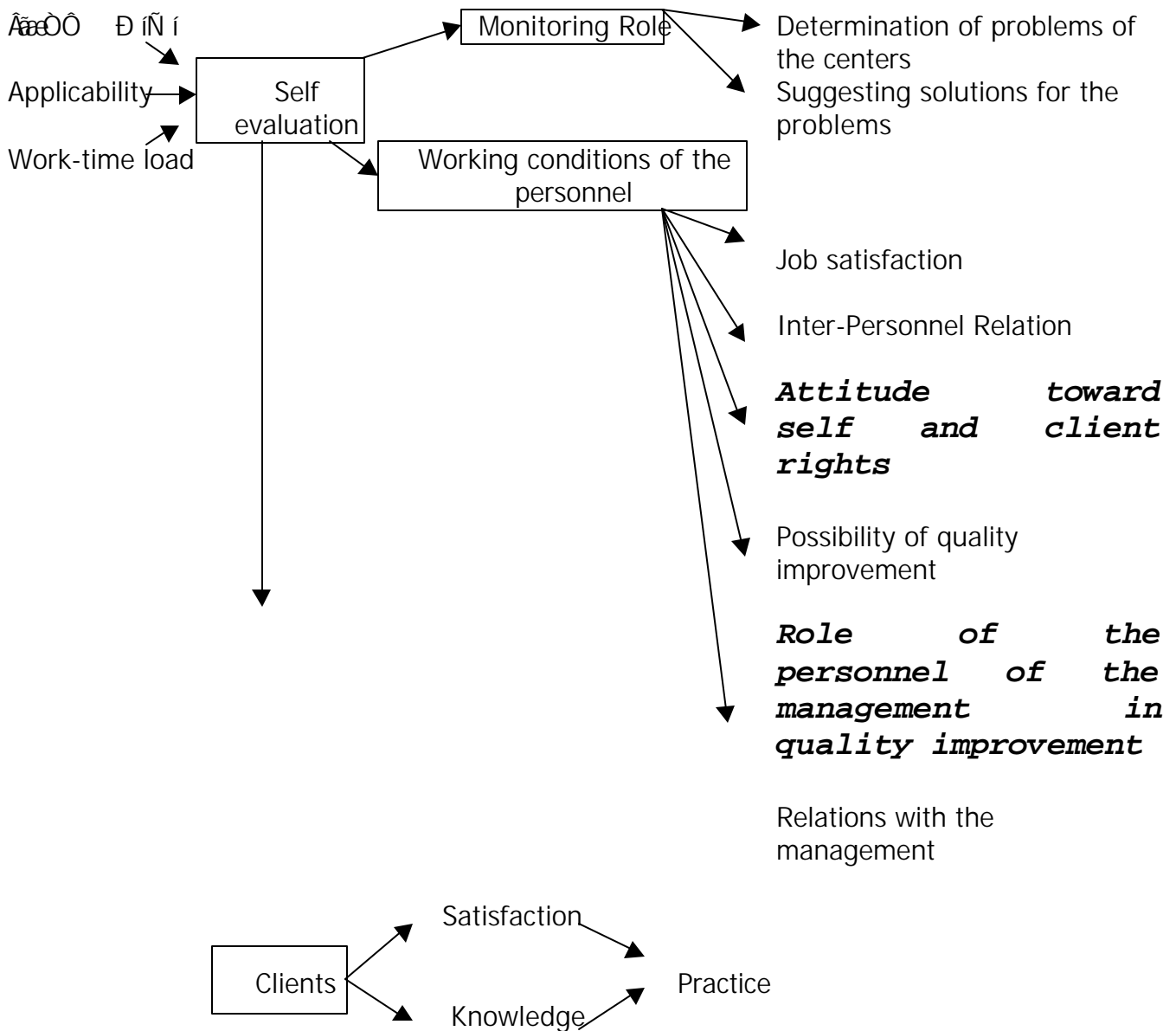
The implementation of "monitoring in a self evaluation fashion" in the pilot center, not only led to the objective-A of the field study (finalization of the instruments and how to proceed with "self evaluation"), but also, showed the way to proceed with the effectiveness study. In fact, the changes undergone at the pilot center showed that "self evaluation" is not only a monitoring tool, but also, has the positive impact of promoting the service quality in the centers. In practice, in the pilot center, the instruments were finalized, the way to proceed was determined, and positive changes were observed in the quality of the services. Characteristics of the quality service, which were determined by the

project executives through review of literature, were a base for regulating the variables which were studied in the objective-B of the field study (analyzing the effectiveness of the self monitoring method). It is especially worth noting that it took around 80 days to achieve these results at the center. In fact, the results of the above study revealed that if "monitoring in a self-evaluation fashion" and the way to proceed with it are considered as a supportive measure for the center, then it is expected to show the following chain of changes:



Studying of the whole structure of this chain is a time consuming process. For example, the studies undertaken in Guatemala and Mexico, with the objective of evaluating COPE and CQI in family planning programs, took approximately 3 years. Long term study of the outcome of this in a township can best achieved in a comparison of Before-After intervention study, due to the fact that in practice we cannot consider various centers of one township separately, as, their managers and staff do have joint meetings, and may influence each other. The conclusion is that the study of the chain outcome (client practice, continuation of receiving services by the clients, and network coverage) should be a long term Before-After study. However, for a short term (few months) and limited study, the study variables are limited to the first three rectangles of the chain. These are the same variables which were studied in practice, and their co-relationships are shown in the diagram on the following page.

Diagram of the relationship between under study variables



As shown in the diagram, in order to study the effectiveness, we have to first focus our objectives toward the study of "self evaluation in a monitoring fashion" from learning orientation, applicability, and, time and work load, points of view.

In the next step, we can study the effects as a monitoring tool and a way to change the working conditions of the personnel and the clients. So, on the following page we have listed the general goals and specific objectives of the study.

General goals, and the specific objectives, related to each of the general goals

GENERAL GOAL 1: Determination of easiness of teaching of applicability of "self evaluation" at the center.

Specific Objectives:

1-1- Determination of learning orientation of "self evaluation" in general.

1-2- Determination of learning orientation of "self evaluation" based on each of the instruments analyzing the service provision, interviewing the clients, analyzing execution program and timing).

1-3- Determination of applicability of "self evaluation" in general.

1-4- Determination of applicability of "self evaluation" based on each of the instruments.

1-5- Determination of work load (difficulty of execution timing) and personnel satisfaction from "self evaluation" program.

GENERAL GOAL 2: Determination of the effect of "self evaluation" as a monitoring too.

Specific Objectives:

2-1: Determination of type and number of the problems based on the instrument (analyzing the service provision, interview with the client, analyzing the timing).

Comparing the problems determined by "self evaluation" and "regular supervision" according to:

2-2: The number of problems determined

2-3: Number based on quality measures

2-4: Number based on the level to which the problem has been referred from

2-5: Success achieved in the implementation of the the solution.

GENERAL GOAL 3: Determination of the effect of "self evaluation" on the working conditions of the staff of the center

Specific Objectives:

- Determination of the effect of "self evaluation" on personnel attitude towards:

3-1: Relation with the center's management

3-2: Personnel inter-relations

- 3-3: Self rights and client rights
- 3-4: Possibility of improving the quality
- 3-5: Role of the staff in improving the quality
- 3-6: Role of the center's manager in improving the quality

- Determination of effect of "self evaluation" on the center's practice towards:

- 3-7: Relations with the center's manager
- 3-8: Inter-personnel relations

- Determination of the effect of "self evaluation" on job satisfaction of the personnel:

- 3-9: In general and towards:
- 3-10: Self job status
- 3-11: Center's manager
- 3-12: Relations with colleagues.

GENERAL GOAL 4: Determination of the effect of "self evaluation" on clients satisfaction and knowledge

Specific Objectives:

- Determination of the effects of self evaluation on:

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4-1: Clients satisfaction of: The physical conditions of the center, availability of the services and staff, and duration of waiting.

4-2: Knowledge of the client

The following tables show how to determine a method to achieve each of these goal:

Goal No.	Goal	How to Determine	Determining instrument	Determining time
1-1	Learning orientation of self evaluation	Staff opinion toward: Perception of self evaluation goal Effectiveness of the education Learning how to perform self evaluation	Self performance questionnaire	10-15 days training & working with each of the guides
1-2	Learning orientation based on each of the instruments	Opinion of each of the staff on learning of each of the instruments		
1-3	Self evaluation applicability	Opinion of each of the staff on possibility of implementing the self evaluation program, their active participation in group work and the role of self evaluation in determining center's problems		
1-4	Applicability based on instruments	Opinion of each of the staff on applicability of using each of the self evaluation instruments		
1-5	Work load and personnel satisfaction of the self evaluation program	Opinion of each of the staff toward: Difficulty of performing self evaluation Time needed to perform this task Satisfaction toward performing this task Recommending self evaluation to other colleagues		

No	Goal	How to Determine	Determining Instrument	Determining
2-1	Variety of problems determined by self evaluation	Number and type of determined problems based on the instrument	Performance of the centers	Based on the first phase of self evaluation in the center
2-2	Monitoring role of self evaluation	Comparing the determined problems through "self evaluation" and regular supervision according Number of determined problems Based on quality measures Based on the level which the problem had been reflected from Successfulness of implementing the solution	Execution program forms of the center plus supervision reports of higher levels	Based on the report or the first phase self evaluation intervention and control center of the same time
3-1	Attitude of the staff towards their relation with the center's management	Opinion of staff toward the following phrases: Manager of the center should always keep his distance with the staff otherwise staff control would become difficult Showing sincerity toward manager of the center is a sign of flattery of should be avoided	Self performance questionnaire	Before interview after the first phase of self evaluation

3-2	Attitude of the staff toward relations between colleagues in the center	Opinion of the staff toward the following phrases: If my colleague cannot perform his duties appropriately, I am willing to help him Effect of the quality of service provided by other colleagues on each other's works	Self performance question	Before interver of after the firs phase of self evaluation
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Goal No.	Goal	How to Determine	Determining instrument	Determin time
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3-3	Attitude of the staff toward: their own needs	<p>Questioning staff on:</p> <ul style="list-style-type: none"> The needs of the staff for provision of appropriate service for the clients look for number and variety of the answers The importance of provision of material needs of staff for improving of the service quality Role of provision of staff needs on provision of clients requirements Appropriate ness of determining the responsible person in case of any faults. Positive negative points of current supervision by higher levels Role of super vision on improving the quality of care Need for training in order to provide a good service Reasons that cause pregnant women the center Logical expectations of pregnant women 	Self-performance questionnaire	Before interventio after the fi phase of st evaluation
3-4	Attitude of the staff toward possibility of quality improvement	<p>Their opinion towards:</p> <ul style="list-style-type: none"> Possibility of improving the quality under current management of the center. Possibility of improving the quality in absence of resources and instruments Possibility of improving the quality in of the current salaries of benefits or benefits and hardships of life 		

3-5	Attitude of then staff toward their role on quality improvement	Their opinion towards: Willingness to participate in quality improvement process willing ness Not having a major role of quality improvement		
3-6	Attitude of the staff toward managers role on quality improvement	Their opinion towards: Ability of the managers on improving the activities of the staff Role of the relation ship between the manager of his staff in determination of solving the problem		

Goal No.	Goal	How to Determine	Determining instrument	Determining time
3-7	Current situation the center regarding the relations between staff manager	Opinion regarding: Taking into account staff participation regarding the quality improvement Manager paying attention to person (not the problem if self) to eliminate the fault Staff justifying their faults (if any) in spite of their wrong doing. Intimacy with the manager Paying attention by center's manager to provision of staff needs	Self-performance questionnaire	Before interventio after the fi phase of se evaluation

3-8	Current situation regarding relations of staff with each other	Intimacy of center's staff with each other of staff to find appropriate solutions for the problems raising the problems with each other		
3-9	Job satisfaction in general	Total points calculated from -3/0 too 3-120 the same value		
3-10	Job satisfaction of staff regarding their present job status	Staff opinion toward: Effectiveness of job Job being non-repeated & needs innovation of the job Valuability of the job Job having a base for career development		
3-11	Job satisfaction of staff regarding center's management	Staff opinion on manager's characteristics to ward: Giving value too his job Paying respect too him Capability of the manager Manager using staff participation Paying attention to staff need Giving appropriate to feed back to staff work		
3-12	Job satisfaction of staff regarding their colleagues	Staff opinion toward: Sense of responsibility of colleagues Enjoying intimate relations (in formal relations) Enjoying non-antagonistic relations Caring for each other		

4-1	Client satisfaction	Satisfaction of pregnant women from: physical conditions of the center Availability of services staff waiting time	Satisfaction questionnaire completed by interviewing pregnant women	Before intervention after the final phase of self-evaluation
4-2	Clients knowledge	* According to answers of pregnant women to the questions asked	Client Knowledge questionnaire completed by interviewing the clients	

It was agreed to print four questionnaires for various variables under study. Following are the titles of these four questionnaires:

- 1- Questionnaire to analyze the learning orientation and applicability of self evaluation program.
- 2- Questionnaire to study working conditions (Attitude and Practice) of the staff.
- 3- Questionnaire to study job satisfaction of the staff
- 4- Questionnaire to study clients' knowledge and satisfaction rate.

In order to prepare the questions for the above questionnaires, the following steps were taken:

- 1- Defining variable based on the goals mentioned in the table.
- 2- Organizing one focused group discussion meeting with the questionnaires' addressees at Hazrat Roghayeh Center, in order to use their own phrases in the preparation of the questions. (Date: Nov.13, 2000). In other words, it could be said that in this phase the questions were translated into the language of the addressee group.

The results of this work are shown in Annex-2 under the title of Preliminary Questionnaires.

- 3- The preliminary questionnaires (study of working conditions, job satisfaction and client interviews) were used on a pilot basis at the Abouzar Center, situated in the south of Tehran city (Date: Dec.6,2000). Applicability questionnaire was also used on a pilot basis at teh Hazrat Roqiyeh Center (Date: Dec. 21, 2000)

The result of the above activities was the design of the questionnaires shown on the following pages. These questionnaires bear the goal number connected to each of the questions.

In the Name of the Almighty

Questionnaires to study the applicability and rate of learning orientation of monitoring by "self evaluation method" in the health centers.

Dear Colleague,

The following form is designed to study the monitoring by self evaluation method in your center. In view of the importance of your opinions on this evaluation and its effect on the expansion of this instrument in the whole country, please complete this form carefully. We highly appreciate your co-operation and truthfulness in the completion of this form.

"The Monitoring and Evaluation Group"

Please mark the most suitable answer regarding the 1-1 sentences according to the training program and your own practical experience.

	Totally Against	Moderate	Agreed	Highly
1- I have easily understood the goals of monitoring by self evaluation method.		1-1		
2- The training of self evaluation method was beneficial for easy understanding and appropriate use of this method.		1-1		
3- I learned how to "Analyze the services" fully		1-2		
4- I learned how to "Interview the clients" comprehensively		1-2		
5- I learned how to "Analyze timing" accurately		1-2		
6- I learned how to Perform operational program in full		1-2		
7- Monitoring by self evaluation method is applicable		1-3		
8- "Service analysis" instrument is applicable		1-4		
9- "Client interview" instrument is applicable		1-4		
10- "Time analysis" instrument is applicable		1-4		
11- "Operational program" instrument is applicable		1-4		
12- Monitoring by self evaluation method is easy		1-3		
13- Center's staff can actively participate in group jobs		1-3		
14- Group work has played an effective role in the determination of the center's problem		1-3		
15- The benefits of monitoring by self evaluation are worth the time consumed of this job		1-5		
16- The benefits of monitoring by self evaluation are worth the hardship of this job		1-5		
17- The use of monitoring by self evaluation is fully satisfactory		1-5		
18- In this way of monitoring, problems of the center can be easily determined and solved		1-3		

19- I recommend the use of this monitoring method to my colleagues in other centers, for use on their own center.

1-5

1: What are the problems faced in using the monitoring by self evaluation method? (1-3)

2: What are the positive points of using the monitoring by self evaluation method?

(1-3)

Questionnaire to evaluate the monitoring tools based on client attitude (Form No1-staff questionnaire)

Dear Colleague,
 The following form is designed to study the attitude and practice of staff of the health centers regarding the quality of services. You are requested to answer the questions without mentioning your name or specifications.
 We highly appreciate your co-operation and truthfulness in the completion of this form in advance.

Please mark the nearest answer regarding the 1-18 questions:

	Highly Agreed	Moderate	Against	Totally against
1- It is impossible to improve the work (increase the quality of services) with the current management of the health center.		3-4*		
2- The staff of the health center cannot play a major role in improving the quality of services		3-5		
3- Working conditions of the health center are such that they would gradually lead to staff disappointment.		3-11		
4- In the absence of needed resources and equipment, there is no way to improve the quality of services.		3-4		
5- I am ready to take part in any activity leading to quality improvement of services		3-5		
6- The quality of service provided by one staff has nothing to do with the quality of services provided by his colleagues		2-3		
7- With our current salary, we are so much involved with living difficulties that there is no time to work better.		3-4		
8- Most of the staff of the center do not need any on-the-job training for rendering good service		3-3		
9- If the staff needs are taken into consideration, then one can expect them to fulfill the client needs appropriately.		3-3		
10- If a manager cannot fulfill the material needs of his personnel, he can still improve the quality of the service provided by them, by fulfilling their other needs.		3-3		
11- Managers of the centers cannot play a major role in improving the activities of their staff.		3-6		
12- In case of any fault, the responsible person should be immediately recognized to avoid any further problems.		3-3		
13- A friendly environment between the manager and his staff can help in defining and solving the center's problems.		3-6		

* - These figures show the number of the respective goals of each question in the goal tables.

14- In case my colleagues cannot perform their duties properly, I am ready to help them in the performance of their duties.

3-2

Please mark the most appropriate answers to the questions in this section, based on your opinion about the current situation of the health center.

	Totally against	Against	Moderate	Agreed	Highly agreed
15- Center's manager considers opinion of the staff regarding provision of appropriate services.	3-7				
16- The staff of this center (and not just the staff of one section), help each other in finding a solutions for the problem raised.	3-8				
17- The staff of this center enjoy complete intimacy with each other	4-8				
18- The staff of this center do not share their working problems with each other	3-8				
19- In case one of the center's staff commits a mistake, he receives a personal warning, in order to avoid further problems	3-7				
20- Usually the staff try to defend their work, even if they have committed a mistake.	3-7				
21- The staff of this center have complete intimacy with the manager.	3-7				
22- The manager of the center thinks only in terms of showing a better performance of the center to higher level managers.	3-7				
23- The manager of the center should always maintain a proper distance from his staff. Otherwise, it will be difficult for him to control his staff.	3-1				
24- Showing intimacy of the staff with the manager of this center is a sign of flattery, and, should be avoided.	3-1				
25- To improve the quality of service, the manager of the center pays attention toward fulfilling staff needs.	3-7				

26- In your opinion, in order to improve the quality of services, supervision of higher levels is (Mark the most appropriate answer) (3-3)

Very important	Important	Is of low importance	Not important
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27- In order to improve the function of staff, how important do you think is the provision of their material needs? (mark the most appropriate answer)

Most important	Important	Has low importance	Not important
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28- Imagine that a pregnant woman has come to your center for care. In your opinion which expectations may she have? Please name by degree of importance (3-3)

29- In your opinion, what are the needs of the center's staff, to enable them to provide appropriate service for the clients? Please name by degree of importance (3-3)

30- In your opinion, which reasons may prevent pregnant women from coming to the center to meet their maternal care requirements? (3-3)

31- In your opinion, what are the positive and the negative points of the current supervision by higher levels? (3-3)

In the Name of the Almighty

Questionnaire to evaluate monitoring instruments with an attitude towards service recipient (Form No.2 - The questionnaire of personnel job satisfaction)

The form presented to you is designed to study the job satisfaction of the staff at the health center. You are requested to fill this form out without mentioning your specifications. We shall highly appreciate your co-operation and truthfulness in the completion of this form.

"The Monitoring and Evaluation Group"

Please mark your opinion in each section in accordance with the offered items.

A-I think my work is

	Thoroughly	Fairly	Moderately	Thoroughly	Fairly	
1- Effective						useless
2- Not repeated						repetitive
3- Attractive						Intolerable
4- Worthy						worthless
5- Of a ground for improvement						of no ground for improvement

B- My supervisor

	Thoroughly	Fairly	Moderately	Thoroughly	Fairly	
6- Gives value to my work						gives no value to my work
7- Respects me						respects me not
8- Is an efficient manager						is not efficient
9- Engages the personnel in decision making						is obstinate
10- Pays attention to my needs						Pays no attention to my needs
11- Gives useful feedback on my work						Gives no useful feedback on my work

C- My colleagues

12- Are responsible towards their work
 13- Have a friendly behaviour
 14- Have a pleasant attitude towards one another
 15- Care for me

Thoroughly	Fairly	Moderately	Thoroughly	Fairly

are irresponsible towards their work
 have a very cold behaviour
 have an unpleasant attitude towards one another
 do not care for me

In the Name of the Almighty

Questionnaire to evaluate the monitoring tool with the attitude of the service recipient (Form No-3: Pregnant women's questionnaire) "Client satisfaction"

Educational level:

1- How long did it take for you to reach this place from your home, today?
..... minutes

2- How difficult was it for you to reach this place?

Very difficult	Difficult	Moderate	Easy	There was no difficulty
----------------	-----------	----------	------	-------------------------

If it was difficult, please mention the difficulty

3- From the time you reached the center, how long did it take for you to reach your turn? minutes

4- How difficult was this delay?

Very difficult	Difficult	Moderate	Easy	There was no difficulty
----------------	-----------	----------	------	-------------------------

5- What was the reason for your coming to the center today?

6- Did you fulfill all the reasons that urged you to come to the center, today?
yes no

If not, why?

7- How was the behaviour of the center's staff towards you?

Please mention the behaviour of each one of them, separately.

- 1st) Physician
- 2nd) Staff of the family health department
- 3rd) Admission
- 4th) Center's guard

Very good	Good	Moderate	Bad	Very bad
Very good	Good	Moderate	Bad	Very bad
Very good	Good	Moderate	Bad	Very bad
Very good	Good	Moderate	Bad	Very bad
Very good	Good	Moderate	Bad	Very bad

8- In case of undergoing medical examination, how safe did you feel (regarding the environment)?

Completely Relatively Not at all Not examined

9- Did you ask the center's staff any questions?
yes No (1379-2)

10- Did you have an opportunity to ask all of your questions?
Yes, all of them Yes, some of them
No, none of them Other, please specify

11- Did they respond adequately to all of your questions?
Yes, totally Yes, relatively
Not at all Other, please specify

12- Were the center's staff expert in their jobs?
Yes, totally Yes, relatively No

13- Are you satisfied with the cleanliness of this center?
Yes Relatively No I didn't pay attention

14- Would you recommend this center to others?
Yes No

15- Name five positive points of this center:

16- Name five negative points of this center:

17- Overall, are you satisfied with the service provided for you today?

Totally satisfied	Satisfied	Relatively satisfied	Unsatisfied	Totally unsatisfied
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If you are unsatisfied, mention your reasons (1379-2)

"Knowledge of the Client"

Is the answer of pregnant woman correct?	Yes	No
1- When is your expected delivery date?		
2- Name the signs of a high risk pregnancy		
3- Where would you refer to in case of the development of any of these high risk signs?		
4- Name your drugs and mention how you consume them?		

Guidelines for the Completion of the Clients' Knowledge Questionnaire

In the completion of this questionnaire, please take into account the following points:

Ask each of the questions from the pregnant woman. Then according to her answer, judge whether she is right or wrong. Choose "yes" if the pregnant woman knows the correct answer. Choose "No" if she does not know the correct answer to the question.

1. First question: After she has answered the question, check the expected delivery data with her file, and if it is wrong, choose "No" as the answer.
2. Second question: The pregnant woman should name the signs of high risk pregnancy. These are a total of 10 high risk signs. If she names less than four of them, choose "No" as the answer.
3. Third question: Choose "Yes" as the answer, if she gives the correct answer.
4. Fourth question: If "No" drug has been prescribed for the pregnant woman, then leave the answer space blank. If some drugs have been prescribed for her, but she does not know their names, then she should show her drugs to you and mention the correct way of their consumption. If she does not know the correct way to use them --- even one of them--- then choose "No" as the answer.

(1379-2)

Method of the Study:

Please find the general scheme of the study on the following page. First, basic data regarding two questionnaires of "working conditions of the centers' staff" and "job satisfaction of the staff" were collected from 9 urban health centers of Semnan township.

The official responsible for collecting these data, divided the staff into two groups, so that the center could continue to provide its services to the clients. Each of these two groups, who were the potential members of the

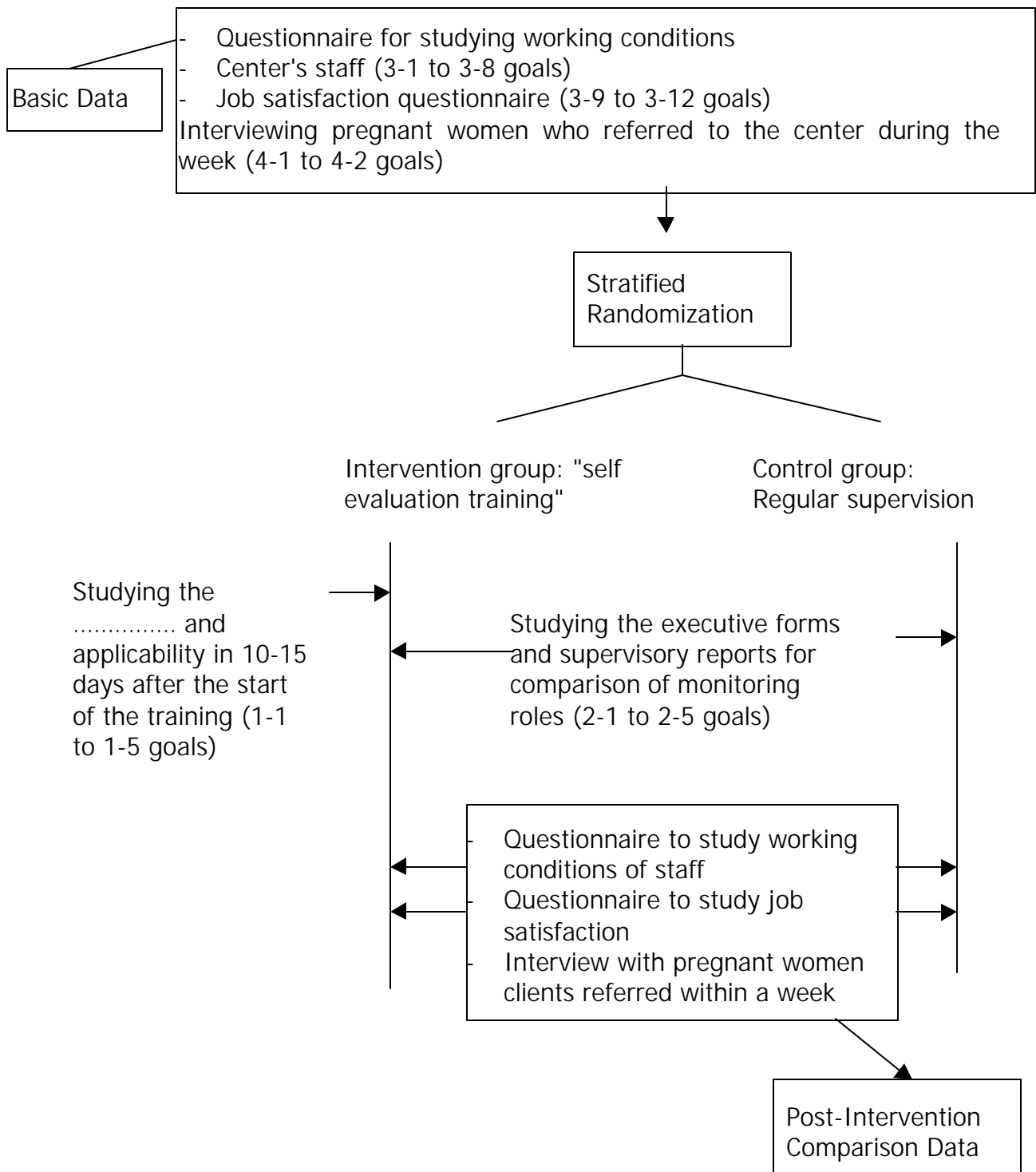
"self evaluation" group, got identical briefings, which were co-ordinated between members of the execution team. These briefings included the following, in general:

The final goal of completing the questionnaire by them. The importance of their opinions, as it could either lead to the expansion of a program in a very broad spectrum or could lead to the elimination of this program. So, it is important to complete the questionnaires with sufficient attention. They do not need to mention their name and family name. The execution team shall not seek to identify people. The results would not be classified according to the center's name, and the fact is that this study is only designed to evaluate this type of monitoring method, and does not aim to evaluate the center or its management. Describing the attitude and practice questions, and mentioning that they should place themselves at their actual position in the center, and first describe their point of view regarding each of the phrases. and then mention their opinion about the current situation at the center.

Regarding the job satisfaction questionnaire, the execution team used an example to show the answering group how to show their answer in a spectrum.

For the completion of the client interview questionnaire, as the "service analysis" tool of self evaluation covers the maternal care program, it was agreed to interview each of the pregnant women who would come to the center, after giving them appropriate service. The duration for the above would be one week, and would begin from the day after collecting the two first questionnaires at each center. The physician and/or physicians of the centers were selected for performing the interview. All of them were briefed by the same person.

In view of the fact that the centers participating in the "Random allocation" were not many, we selected "stratified randomization" as our method (See the following Figure).



General scheme and analysis of monitoring by self evaluation in urban health centers "Semnan 2000-2002"

All the questions regarding attitude, practice, and job satisfaction, received equal weight, and a final score was calculated for each person. Afterwards, the median score of the centers was calculated and the centers were divided into three: low, middle and high levels. Accordingly, 1, 2 and 3 points were allotted to each of the three levels, respectively.

As each center was under study for three variables of attitude, practice and job satisfaction, the minimum possible score was 3, while the maximum possible score was 9.

Based on the total scores, a final level was calculated for each center, and the centers were divided into three: "high" "middle" and "low" categories.

	Job satisfaction	Staff attitude towards working conditions	Center's performance based on staff opinion
High (3 points)	1	1	1
	3	2	2
	6		3
	8		
Middle(2 points)	2	3	3
	5	5	5
		6	6
		8	8
Low (1 point)	4	4	7
	7	7	9
	9	9	

Classification of the centers has been made according to their total attitude, practice, and job satisfaction scores (the figures of each level show the center's code).

One center from each of the high and low class, and two centers from the middle class were randomly selected.

As a result, four centers were categorized as intervention groups (self evaluation training). The five remaining centers were categorized in the control groups. However, during the first introductory phase, it was revealed that Center No.3 had already undergone a FOCUS-PDCA quality improvement method. As the problems of this center were somehow different from the regular problems of other centers based on "Protocol Deviation" it was decided to omit this center from the study, and simply continue its training.

Center Code	Ranking	Classification
1	1	1
2	2	
3	4.5	2
5	4.5	
6	4.5	
8	4.5	
4	7	3
7	8.5	
9	8.5	



The centers were classified according to their total scores on attitude, practice of the personnel in relation to the working conditions of the center, and, their job satisfaction. Each class went under a random allocation. Center No.1 was selected from the first class; Centers No.3 and 5 were selected from the second class; and center No.9 was selected from the third class. However, after omitting Center No.3, only one center remained in each category.

The self evaluation training program was designed in such a way that the staff of the centers were briefed at a general meeting. During this general meeting, they also saw the commitment of higher management in this regard. This 1.5 hour meeting was organized on Dec. 25, 2000. The detailed agenda of the meeting was as follows:

- | | |
|---|------------|
| - Recitation of verses from the Holy Quran | 10 minutes |
| - Delineation of the Objectives of the meeting and the importance of self evaluation at the centers (Health Deputy of the University) | |

	10 minutes
- Introduction to "monitoring by self evaluation method" and its instruments ("self evaluation" co-ordinator from a pilot center)	
	20 minutes
- Outcomes of the project at Hazrat Roghieh pilot center (two members of the family health unit)	
	20 minutes
- Self evaluation training schedule at the centers (head of the township health center)	
	10 minutes
- Question and answer session (a panel consisting of the deputy to the provincial health deputy, an expert responsible for provincial family health, and the head of the pilot center)	

The training sessions of the intervention centers, were organized in three days. They were fully in conformity with the training program mentioned in the "self evaluation" co-ordinators guidelines.

The training sessions were instructed by three persons: The co-ordinator, one of the family health experts of the pilot center, and the township co-ordinator who was also an expert on family health. It is worth noting that in order to avoid bias from the real intervention conditions, one of the objectives of this study was an analysis of learning orientation of "self evaluation". Members of the executive team were not present at these sessions. These members of the executive team were only present at the general meeting, and, on the first day of training at the Tadayon Center (3 days in total), to incorporate possible corrections in the training program.

The training programs of the centers were carried out as follows:

<u>Name of the health center</u>	<u>Training date</u>
Tadayon	Dec. 30 - Jan.1
Mohaqq	Jan. 6 - Jan. 8

During the three day training at each center, two "service analysis" guidelines were discussed. Therefore, to complete the review of all service analysis guidelines, and perform the first phase of self evaluation at the centers, at least 6 additional working days were required. It was agreed to complete the learning orientation and applicability" questionnaire in 10-15 days after the start of training at the centers.

It was envisaged that a double-blind study of regular supervision at the control centers should be carried out by township and provincial experts, concurrently with the performance of the first phase of "self evaluation" at the intervention centers. Actually, only a few people were supposed to know that the results of these regular supervisions were going to be compared with the "self evaluation" results, (which were reflected in the execution program form).

However, in practice, the usual supervisory reports show that most people were either aware of their supervision purpose (due to report request from the provincial capital) or performed their supervisory task under the influence of "self evaluation". As a result, in order to compare the self evaluation, monitoring method with the current supervisory methods, three reports from previous supervisions were collected from each center. All of the supervisory reports and operational program form were collected by January 25, 2001. Post-intervention data from interviewing the pregnant women were collected¹ from January 23, 2000, while, the working conditions and job satisfaction questionnaires were collected on January 25, 2001. Thus, the time-lapses between the first day of training and the post-intervention data collection, were as follows:

<u>Duration between start of training till post-intervention data collection (days)</u>	<u>Health center</u>
26	Tadayon
29	Mohaqq
16	Sorkhe

1- Till Feb 3, 2001, which was the date of final editing of the report, due to bad weather conditions and the resulting decline in the number of pregnant women referring to the center, the needed sample volume was not collected fully. Hence, the data regarding the fourth goal analysis of the effect of self evaluation on clients' knowledge and satisfaction were not analyzed, and the results are going to be announced after receipt of the complete sets of questionnaires.

Analysis Method¹:

In this section, the analysing method of the collected data are divided separately for each of the general goals:

GENERAL GOAL 1: Determining learning orientation and applicability of "self evaluation method at the centers:

In this section, the relative number of answers of the staff of the centers practising "self evaluation", were calculated. Concurrently with this analysis at the intervention centers, the status of Hazrat Roghaye pilot center was also analyzed. Regarding the characteristics of the preliminary test, the duration for the "Finalization" of the instruments and tools was longer at the Hazrat Roghaye Center. Also, due to the lack of prior experience, the training method was not complete at this center. Training at the center was carried out by the executive team, while in other intervention centers, training was provided by both, the center's staff and, the township co-ordinator.

On the other hand, the duration between the start of the training and applicability study and learning orientation at the pilot center was 80 days (and after completion of three practical "self evaluation" phases), while for the intervention center, this duration was 10-15 days (and after completion of just one "self evaluation" training phase). In view of this position, a comparison between the intervention centers and the pilot center is important.

Two open-ended questions were also asked at the end of the questionnaire. These two questions were aimed at analyzing the positive and negative impacts of self evaluation. The points mentioned by each of the staff have been classified for each of the respondents, and in total, for each of the intervention and pilot centers.

GENERAL GOAL 2: Determining the impact of "self evaluation" as a monitoring tool:

"Self evaluation" and regular supervision were compared for the number of determined problems, the quality measure and the level which the problem was referred to.

1- Due to the variety of general goals and applicability of different analyzing methods to analyze them, this section, along with conclusions and discussions, are divided separately for each goal.

GENERAL GOAL 3: Determining the effect of "self evaluation" on working conditions of staff of the centers:

In order to analyse the specific objectives of this general goal (which amounted to a total of 12 objectives), two questionnaires with 42 closed and four open-ended questions were designed. We had first to ascertain the validity and reliability of these questions. To achieve this, one week after the collection of the basic data, the questionnaires were re-tested at the Jahadieh Center, to study their reliability. Later, the total attitude, practice, and job satisfaction scores were calculated separately. The upper and lower 27% of the scores were considered as a base, and the Discrimination Index for each question was calculated according to the Pierson Co-operation Index. [Source: Robert Ebelii, et al (1986): Essentials of Educational Measurement, 4th edition]. To facilitate this calculation, the item Response Pattern was also determined. All of the above calculations were done by Visual Basic (version5) software. As a result the 4th and the 5th questions of the "job satisfaction" questionnaire and the 9th and the 19th questions of the "Attitude and Practice" questionnaire, were deleted from the study analysis.

In order to analyze the above objectives, first of all, the answers were classified based on 1-5 Scro Likert Scale, and then, average scores were calculated for each objective. Regarding the data collection, it was agreed to consider Before and After Study results of each person as paired, and then analyze it. However, in practice it was revealed that writing the codes and other specifications on the questionnaires would make the participant doubt the information secrecy, which would in turn, would definitely lower the accuracy of the answers. As a result, in practice the paired personnel data were not available for appropriate analysis. On the other hand, due to the lack of availability of the co-variance between the two data collection durations (and their impact on variance difference), personal analysis of independent data was not acceptable.

At the end of the study, the average score of each center was calculated. In order to analyze the difference between the two (intervention and control) groups, the statistical unit under survey was considered as "central".

To begin with, the difference between each center's score in the pre-intervention and post-intervention phase was calculated. Later, using the t-student and Mann-Whitney surveys, the average difference between the "self evaluation" intervention and control (Regular supervision) groups was calculated.

All the above data were entered into computer memory by Epi Info (6th version) software, in two phases. After validating these data, they were analyzed by SPSS for Windows (10th version) software. Analysis of the open-ended questions of this section was carried out in a similar manner to that of the open-ended questions of the learning orientation and applicability section.

RESULTS:

Results of the study on learning orientation and applicability, work load and self satisfaction from "self evaluation":

Table 1 shows the results obtained from close questions, regarding the above subjects. It should be explained that in this table, the "moderately", "against" and "totally against" answers are equivalent to unsuccessful. While analyzing this table, it should be noted that the total sample volume of the pilot center was not more than 10 persons.

As shown in the table, 100% and 87.5% of the staff of the pilot and the intervention centers respectively, recommended to their colleagues to use the "self evaluation" at their centers.

At the pilot center, "job survey", and at the intervention centers, "execution program" and "job survey" were the most difficult parts of learning orientation and applicability, respectively.

"Time analysis" instrument was used at the pilot center without facing any problems regarding its training or application. However, at the intervention centers, this instrument was related to "client interview".

Table 1 - Percentage of 'totally successful' and 'successful' answers to the goals questionnaires on applicability, work load, and satisfaction from "self evaluation" according to intervention and pilot centers.

Goals	Intervention centers (n=32)			Pilot centers (n=10)		
	Totally succes sful	Succes sful	Unsuces sful	Totally succes sful	Succes sful	Unsucces sful
Learning orientation						
Job survey	38.7	48.4	12.9	40.0	30.0	30.0
Interview with the client	50.0	50.0	0.0	70.0	20.0	10.0
Time Analysis	65.6	28.1	6.3	80.0	20.0	0.0
Execution Program	51.6	32.3	16.1	70.0	20.0	10.0
In general	35.9	53.2	10.9	40.0	55.0	5.0
Applicability						
Service survey	37.5	37.5	25.1	20.0	20.0	60.0
Interview with the client	37.5	50.0	12.5	60.0	30.0	10.0
Time Analysis	48.4	32.3	19.4	70.0	30.0	0.0
Execution program	32.3	48.4	19.3	30.0	20.0	50.0
In general	39.0	40.0	21.0	66.0	18.0	16.0
Work load and staff satisfaction						
Time load	46.9	28.1	25.0	40.0	30.0	30.0
Work burden	31.3	46.9	21.9	70.0	20.0	10.0
Satisfaction from self- evaluation	25.8	54.8	19.4	70.0	20.0	10.0
Recommending self evaluation to other colleagues to use it at their own centers	40.6	46.9	12.5	70.0	30.0	0.0

Table 2 shows the negative impacts of "self evaluation" according to the statements of various centers' staff. As shown, the staff of the pilot center mentioned 13 points, making it 1.3 points per person. Meanwhile the staff of the intervention centers mentioned 17 points, making 0.5 points per person. The staff of the pilot center mentioned "lack of co-ordination of the higher levels", while the staff of the intervention centers expressed "lack of participation of all staff" as the most common problems.

Table 2 - Number and percentage of the negative points expressed by staff of the pilot and the intervention centers, regarding the "self evaluation" monitoring method¹

Negative Points	Intervention centers (32 persons)	Pilot centers (10 persons)
Weakness in execution		
Lack of comprehension by all staff	3(17.6)	-(0.0)
Unpresence of coordination, during the execution period	1(5.9)	-(0.0)
Lack of participation by all staff	7(41.2)	-(0.0)
Difficulty in using the instruments	5(29.4)	-(0.0)
High work load	-(0.0)	2(15.4)
Weakness in structure		
Lack of coordination in higher levels	2(11.8)	9(69.2)
Not paying enough attention to service providers	2(11.8)	2(15.4)
Total number of mentioned negative points	17(100.0)	13(100.0)
Negative points per person	0.5	1.3

1- The figures expressed in this table are points mentioned by the staff in writing, and then categorized into the present sub-groups.

Table 3 shows the positive points of "self evaluation" according to the statements of various centers staff. According to the results, the staff of the pilot center mentioned 42 points, making it 4.2 points per person. Meanwhile, the staff of the intervention centers mentioned 109 points, making 3.4 points per person. The staff of both, the pilot and the intervention centers, mentioned the following points as the most common positive points:

- 1- Problem location and solution
- 2- Formation of friendly groups among the staff
- 3- Promotion of staff motivation
- 4- Validation of staff activities

Table 3 - Number and percentage of positive points expressed by staff of the pilot and intervention centers regarding the "self evaluation" method¹.

Positive Points	Intervention centers (32 persons)	Pilot centers (10 persons)
Regarding the clients		
Client consideration, forming better relations, and attracting client satisfaction	14(12.8)	1(2.4)
Guaranteeing continuation of approach to the service providers	1(0.9)	1(2.4)
Regarding the service providers		
Validity vision towards staff	10(9.1)	4(9.5)
Paving the ground for innovation	6(5.5)	2(4.8)
Promoting the staff motivation	10(9.1)	4(9.5)
Formation of friendly group among the staff	17(15.6)	6(14.3)
Determination of the work load of each of the staff	5(4.6)	-(0.0)
Reducing the supervisory load and catching the red handed	2(1.8)	3(7.1)
Reducing the necessity of follow up for referral	4(3.6)	-(0.0)
Quality improvement		
Problem finding and solution	20(18.3)	9(21.4)
Reducing the crowding of clients	5(4.6)	1(2.4)
Reducing the waiting time	8(7.2)	2(4.8)
Increasing the appointment time	1(0.9)	4(9.5)
Improving the service quality	6(5.5)	3(7.1)
Total number of mentioned points	109(100.0)	42(100.0)
Positive points per person	3.4	4.2

¹ - The figures mentioned in this table are points made by the staff in writing, and then categorized into the present sub-group.

Results of comparison between the monitoring roles of "self evaluation" and regular supervision at various centers.

Results of regular supervision: The results of the supervisions can be classified based on three categories of time lapse, depth, and nature of the problem, as follows:

1. **Time lapse:** In more than 80% of the cases, the time lapse between the general supervisions (including both, the supervisions carried out by the family health unit and the supervisions undertaken by other units) was more than 2 months (with an average of 4 months and range of 1-8 months).
2. **Depth of the supervisions:** Prior to the supervisions requested by the execution group, the supervisions were mostly undertaken in each unit separately, and the reports were brief. It is worth mentioning here that the supervisions requested by the execution group ended in lengthy reports mentioning the exact positive and negative points (see Annex-3, which shows a specimen copy of Before and After self evaluation supervisory reports). A number of suggestions expressed in these reports are similar to the solutions suggested in the execution program (giving appointment to the clients), which shows that the supervisors were either informed of their supervision goals or were influenced by the self evaluation intervention.
3. **Nature of the problems:** Except for the three supervisions related to validating "self evaluation", which were under the family health department, other supervisions based on their nature are under other departments, such as environmental health, reception, drugs and sometimes family health, department. In general the problems detected in these departments are as follows:

One) The deficiencies of the administrative processes: Such as the deficiencies on registration of leave, receipt giving, incomplete registration of drug prescriptions, deficiencies in registration of attendance , calculation of drugs fee based on the old rates, difference in calculation of bandage rate. It should be noted that these deficiencies counted for more than 50% of the volume of the reports.

Two) Shortage of instruments and facilities: such as drug shortages, malfunction of the machines, the problems of the physical environment of the center and various units, which also counted for a large portion of the supervision reports.

Three) Deficiencies and recommendations regarding the service provision: such as lack of full coverage of various units, imprecise registration of cases and/or coverage, faults in sending reports, heavy crowding of the clients, and provision of service by students. It is worth noting

that some reports mention the general statement of "low quality of care".

Four) Problems, regarding staffing: Which were mostly vacancies of some of the organizational positions at the centers.

Five) Recommendations: In most of the supervisions, recommendations are made regarding the activities of the center, which mainly consider the methods of registration of books and reports and/or recommendations considering educational empowerment of the target groups. There is almost no recommendation on methods for improving the quality of family health care.

Monitoring role of self evaluation: The problems determined by self evaluation can be classified based on four categories: The problems determined based on each instrument; percentage of problems solved till the evaluation time; distribution of out-center problems; and, distribution of problems based on type of the problem.

1. Distribution of determined problems based on each instrument.

Table 4 - Distribution of the determined problems according to the instrument available at each center (percentage) number

Instrument Center	Service Analysis	Interview with the client	Time Analysis	All of the three instruments	Total
Tadayon	10(71)	0(0)	1(7)	3(21)	14(100)
Sorkhe ¹	-	-	-	-	14(100)
Mohaghegh	5(45)	0(0)	0(0)	6(55)	11(100)

2. Percentage of solved problems: As the average time between the start of the self evaluation and its validating date of Jan. 25, 2001, was three weeks, we could not expect the problems to be largely solved during this short period. In practice and in execution programs, it was also revealed that only 20% of the problems were solved prior to the Jan. 25, 2001 date.
3. Distribution of out-center problems: Out of 30 problems revealed, fifteen were related and referred to higher levels (mostly townships). These cases were 4.6 and 5 at Tadayon, Sorkhe and Mohaghegh, respectively.
4. Distribution of problems based on the type of the problem: Various types of problems can be classified into shortage of the instruments, physical environment, educational materials, staff and other problems. In the other problem category, problems such as long waiting periods, large crowds at particular times, lack of continuity in the provision of any specific service, negative attitude of some groups towards the services rendered, and lack of central support. Table 5 shows the distribution of problems based on the type of the problem in each center.

1- In spite of the problems determined in the execution program of Sorkhe center , these data were not divided according to each instrument .

Table 5 - distribution of the revealed problems based on type of the problems in each center (percentage) number

Type of problems Center	Shortage of instruments and facilities	Shortage s regarding physical environment	Shortage of educational materials	Problems regarding staffing	Other problems	Total
Tadayon	4(28.5)	1(7.1)	5(35.7)	-(0)	4(28.5)	14(100)
Sorkhe	4(28.5)	4(28.5)	1(7.1)	1(7.1)	4(28.5)	14(100)
Mohaghegh	4(12.2)	2(1.1)	-(0.0)	-(0.0)	5(45.5)	11(100)
Total	12(30.7)	7(17.9)	6(15.4)	1(3.6)	13(33.3)	39(100)

Problem Determination Based on Quality Measures:

A study of the execution programs of the intervention centers shows that "self evaluation" can reveal the problems related to the logistic phase (shortage of instruments, lack of educational materials, etc). Moreover, it has the ability to reveal the problems related to the quality of services, such as the problems regarding the informational data, guaranteeing the continuity of the process (lack of a follow-up program), human relations (long waiting time), care acceptance (negative attitude of specific groups towards care) and even technical expertise (lack of staff knowledge regarding the standard of care). However, lack of study of problems related to capability to satisfy the varying needs of the clients, and lesser attention to problems related to technical skills, are notable.

On the other hand, these supervisions have only revealed the problems regarding the logistics, registration skills of the staff, human relations (crowd of clients), education (in the form of recommending the improvement of the education of the target groups) and the document regarding the continuity of service provision (delayed care); while, on other subjects, they could not reveal the exact problems.

Determining the Impact of "Self Evaluation" on the Working Conditions of Staff:

The average scores of staff job satisfaction according to pre- and post-education satisfaction parameters are shown in tables 6 and 7. As shown in these tables, the average satisfaction scores have declined or show a minimal change in the control group, while these scores have increased in the intervention group.

T-student statistical study shows a meaningful marginal difference in satisfaction with colleagues (P=0.06), and also a meaningful difference in

general satisfaction ($P=0.045$) (table 8). Non-parametral study of Mann-Whitney reveals similar results in satisfaction with colleagues ($P=0.071$), and general satisfaction ($P=0.036$). No major difference was detected in the attitude and practice of the staff regarding the quality of care in the centers which underwent training, and the control centers. (Tables 9-12). Table 9 shows the average scores of attitude and practice of staff before and after the training at the intervention centers. Table 10 shows the above results for the control group. In total, comparison of the attitude of the staff of the intervention centers, after training with the staff of the control center, shows more negative attitude towards relations with the center's manager in the prior group ($P=0.07$). However, attitude of the staff of the centers which underwent training in relations with each other, were more positive compared with the control centers ($P=0.06$) (Table 11). In non-parametric study of Mann-Whitney, the results of the above program were not statistically meaningful. ($P>01$).

Regarding the distribution of the "attitude of staff toward rights of the clients" as shown in table 12, in the intervention centers, staff paid more attention towards human relations, while paying lesser attention towards the provision of appropriate care.

Table 13 shows that at the intervention centers, the staff attitude towards time barrier of service availability for the client was reduced. Also, the number of barriers per person mentioned in the intervention centers, had increased after self evaluation.

Regarding the "attitude of staff towards their own rights", table 14 reveals no major change in staff attitude towards their rights. However, a comparison between table 15 and table 16 shows that regarding the supervision of higher levels, the number of negative points mentioned by each person was much higher than the number of expressed positive points. The most important weaknesses were related to incomprehensiveness, incapability of supervisors, and not assisting to resolve the problems.

Table 6 - Mean scores of the job satisfaction of Semnan Urban Health Centers staff before and after self evaluation training

Intervention Group			
Job satisfaction value	Mean scores before intervention	Mean scores after intervention	Mean and deviation difference between before and after intervention ⁽¹⁾⁽²⁾
Satisfaction from working level	4.36	4.43	0.17(0.1)
Satisfaction from	3.85	4.07	0.22(0.16)

supervisor			
Satisfaction from colleagues	4.27	4.50	0.23(0.04)
General satisfaction	4.13	4.34	0.21(0.05)

(1) Mean pre-intervention scores / Mean post-intervention scores

(2) The figures in the brackets show the difference deviation

Table 7 - Mean scores of the job satisfaction of Semnan Urban Health Centers staff before and after self evaluation training

Control Group

Job satisfaction value	Mean scores before intervention	Mean scores after intervention	Mean and deviation difference between before and after intervention ⁽¹⁾⁽²⁾
Satisfaction from working level	4.21	4.02	-0.19(0.46)
Satisfaction from supervisor	3.78	3.81	0.03(0.22)
Satisfaction from colleagues	4.38	4.39	0.01(0.15)
General satisfaction	4.12	4.07	-0.05(0.17)

(1) Mean pre-intervention scores / Mean post-intervention scores

(2) The figures in the brackets show the difference deviation

Table 8 - Mean change of the job satisfaction of Semnan Health Center staff before and after self evaluation training

Job satisfaction value	Mean difference before after training in the intervention group⁽¹⁾	Mean difference before and after training in the control group⁽¹⁾	P value⁽²⁾
Satisfaction from working level	0.17	-0.19	0.157
Satisfaction from supervisor	0.22	0.03	0.249
Satisfaction from colleagues	0.23	0.01	0.06
General satisfaction	0.21	-0.05	0.045

(1) Mean pre-intervention scores / Mean post-intervention scores

(2) Study of two-side difference of mean with zero

Table 9 - Mean scores of the attitude and practice of Semnan Urban Health Centers staff regarding the quality of services before and after self evaluation training (Intervention group)

Variables	Mean scores before intervention	Mean scores after intervention	Mean and deviation difference between before and after intervention⁽¹⁾⁽²⁾
Attitude towards relations with center's manager	2.77	2.4	-0.37(0.33)
Attitude towards inter-staff relations	3.96	4.16	0.2(0.08)
Attitude towards possibility of quality improvement	3.31	2.72	-0.59(0.36)
Attitude towards the role of staff in quality improvement	4.39	4.30	-0.09(0.11)
Attitude towards the role of manager in quality improvement	4.56	4.68	0.12(0.23)
Attitude towards clients' rights	3.54	3.66	0.12(0.27)
Relations with center's manager ⁽³⁾	2.82	2.83	0.01(0.29)
Inter-staff relations ⁽³⁾	2.82	2.66	-0.16(0.28)

(1) Mean pre-intervention scores / Mean post-intervention scores

(2) The figures in the brackets show the difference deviation

(3) The last two variables evaluate the practice of the staff

Table 10 - Mean scores of the attitude and practice of Semnan Urban Health Centers staff regarding the quality of services before and after self evaluation training (Control Group)

Variables	Mean scores before intervention	Mean scores after intervention	Mean and deviation difference between before and after intervention⁽¹⁾⁽²⁾
Attitude towards relations with center's manager	2.59	2.70	0.11(0.27)
Attitude towards inter-staff relations	4	4	0(0.14)
Attitude towards possibility of quality improvement	2.97	2.81	-0.16(0.53)
Attitude towards the role of staff in quality improvement	4.23	3.9	-0.33(0.6)
Attitude towards the role of manager in quality improvement	4.30	4.30	0(0.28)
Attitude towards clients' rights	3.38	3.38	0(0.32)
Relations with center's manager ⁽³⁾	2.74	2.64	-0.1(0.26)
Inter-staff relations ⁽³⁾	2.56	2.66	0.1(0.45)

(1) Mean pre-intervention scores / Mean post-intervention scores

(2) The figures in the brackets show the difference deviation

(3) The last two variables evaluate the practice of the staff

Table 11 - Mean scores of the attitude and practice of Semnan Urban Health Centers staff regarding the quality of services before and after self evaluation training

Variables	Mean difference before and after training in the intervention group⁽¹⁾	Mean difference before and after training in the control group⁽²⁾	P-value⁽²⁾
Attitude towards relations with center's manager	-0.37	0.11	0.07
Attitude towards inter-staff relations	0.2	0	0.06
Attitude towards possibility of quality improvement	-0.59	-0.16	0.27
Attitude towards the role of staff in quality improvement	-0.09	-0.33	0.53
Attitude towards the role of manager in quality improvement	0.12	0	0.5
Attitude towards clients' rights	0.12	0	0.6
Relations with center's manager ⁽³⁾	0.01	-0.1	0.58
Inter-staff relations ⁽³⁾	-0.16	0.1	0.42

(1) Mean pre-intervention scores/mean post-intervention scores

(2) Study of two-side difference in mean with zero

(3) The last two variables evaluate the practice of the personnel

Table 12 - Distribution of the attitude of Semnan Urban Health Centers staff regarding the rights of mothers who come to the center

Group	Rights Time	Observing human relations	Training	Providing effective required care	Continuity of services	Accessibility	Total	Number of rights expressed per person
Intervention	Before self-evaluation (32 pers)	42(43)	16(27)	36(37)	2(2)	1(1)	97(100)	3.03
	After self-evaluation (28 pers)	49(58)	8(9)	23(27)	2(2)	3(4)	85(100)	3.03
Control	Before self-evaluation (55 pers)	72(41)	31(18)	59(33)	3(2)	11(6)	176(100)	3.20
	After self-evaluation (41 pers)	58(48)	17(14)	39(32)	0(0)	6(5)	120(100)	2.92

Table 13 - Distribution of the attitude of Semnan Urban Health Centers staff towards factors hindering service recipients from receiving care

Group	Factors of inaccessibility Time	Time	Place	Cultural	Economic	Facilities	Training and information	Personnel	Total	Number of factors expressed by each person
Intervention	Before self-evaluation (32 persons)	4	11	3	3	2	9	1	33	1.03
	After self-evaluation (28 persons)	12	13	0	0	3	8	0	36	1.29
Control	Before self-evaluation (55 persons)	9	9	8	3	6	16	6	57	1.04
	After self-evaluation (41 persons)	5	9	3	5	7	8	8	45	1.09

Table 14 - Distribution of the attitude of Semnan Urban Health Centers staff towards self-rights

Group	Rights Time	Training	Management and supervision	Provision of the required facilities and instruments	Total	Number of rights expressed per person
Intervention	Before self-evaluation (32 persons)	8(8)	69(73)	18(19)	95(100)	2.96

	After self-evaluation (28 persons)	5(6)	67(76)	16(18)	88(100)	3.14
Control	Before self-evaluation (55 persons)	6(4)	124(81)	23(15)	153(100)	2.78
	After self-evaluation (41 persons)	7(5)	100(80)	19(15)	126(100)	3.07

Table 15- Distribution of the attitude of Semnan Urban Health Centers staff regarding the positive points of high level supervision

Group	Rights Time	More capability problem finding	More capability in problem solving	Good attitude	Total	Number of positive points expressed per person
Intervention	Before self-evaluation (32 persons)	4	4	1	9	0.28
	After self-evaluation (28 persons)	2	5	0	7	0.25
Control	Before self-evaluation (55 persons)	9	7	0	16	0.29
	After self-evaluation (41 persons)	3	7	1	11	0.27

Table 16 - Distribution of the attitude of Semnan Urban Health Center staff towards the negative points of high level supervision

Group	Negative Points Time	Lack of continuity	Not being deep and comprehensive	Supervisors not being thoroughly knowledgeable	Not assisting to solve the problems	More trouble-finding	Negative effect upon the personnel's spirit	Assisting towards the high level only	Total	Number of negative points expressed per person
Intervention	Before self-evaluation (32 persons)	2	3	3	4	2	1	6	21	0.66
	After self-evaluation (28 persons)	1	0	5	5	1	1	2	15	0.53
Control	Before self-evaluation (55 persons)	2	7	12	17	2	2	1	43	0.78
	After self-evaluation (41 persons)	2	11	14	9	2	2	1	41	1

Discussion:

The learning orientation and applicability study of "self evaluation" shows that 87.5% and 100% of the staff of the intervention and pilot centers were in favour of extending it to the other centers. The above finding can be regarded as the general result of this section of the study. The study on learning orientation and applicability according to each of the instruments led us to try to correct the problems in the "Monitoring by Self Evaluation Method" educational texts. This in practice showed the need for a special guidance of the co-ordinators, and resulted in the preparation of special texts for this group. The most important positive points stressed by the staff, regarding "self evaluation" are as follows:

- Problem finding and its solution
- Establishing friendly groups among the staff
- Promoting staff incentives and validating their activities.

The above points were expressed by the staff of both, the intervention centers and the pilot centers. However, the weaknesses as stressed in table 13, show the difference between these two groups. The majority of problems mentioned by the staff of the intervention centers are in the training or implementation of the instruments. In contrast, the problems mentioned by the staff of the pilot center include issues regarding compliance with higher levels of the networks⁽¹⁾.

It seems that the difference between the intervention centers and the pilot center is due to the difference in the number of "self evaluation" experiences. One session of "self evaluation" was undertaken in the intervention centers, while the pilot center went through three sessions of "self evaluation".

So, at least part of the current difference in learning and expression of different views on the implementation of the instruments can be attributed to the experience of various centers, which can also be seen in evaluating other objectives of the project. The important point is that regarding the problems stressed at various centers, it seems that after completion of the instrument training, and attention of staff toward client rights, the provision of staff needs becomes obvious. In fact, if the capacity building process at the centers is not in line with the support of higher levels, the possible changes in the attitude and practice of the staff would be nullified. This could pose a serious threat for the continuation of the monitoring by "self evaluation" method. The above concerns make the generalization of "self evaluation" (looking at outside clients who are staff of the health centers at the township level, and similarly, at other levels) a necessity.

In order to determine the effect of self evaluation as a monitoring tool, and compare the problems determined by this method vis-a-vis the problems

1- This point was also expressed orally by administrative managers and experts.

determined by current regular supervisions (which are among the most important monitoring methods), it is sufficient to refer to the findings of the problems determined by regular supervisions and the distribution of the problems determined by self evaluation (table 5). In fact, the depth and extent of the determined problems and the service provision are better determined by using the self evaluation method, rather than the regular supervision. Statements such as low quality or high extent of administrative problems, rather than mentioning the problems of the curriculum or general service provision, mentioned in the regular supervision reports, bear out the above conclusion.

On the other hand, the average four month gap between the supervisions, by itself shows that regular supervision is not a continuous process. Paying attention to staff attitude toward main weaknesses of the regular supervision, including lack of help in trouble-shooting, lack of proficiency of the supervisors, and, lack of comprehensiveness of the system, and the negative impacts of supervision on staff spirit. Also, and at the same time, remembering the main positive points of "self evaluation" as expressed by the staff, including group work, problem finding and solution, and creation of incentives in staff, shows that using this method can be a good complement for the regular supervision.

Table 4 shows that the self analysis instrument played the greatest role in problem determination. Paying attention to the structure of the identified problems at three intervention centers and one pilot center, (Annex 2) clarifies this important point that by repeating self evaluation, the staff ability to identify the problems increases. This in turn, shows that the staff group work has been promoted⁽¹⁾.

Other important findings include high percentage of problems at the higher levels. This stresses the importance of serious co-operation at the higher levels in using this important tool. One of the general limitations of this study, was the time gap for evaluation of the results. So, it is still too early to judge and compare the success of these methods in problem solving. Among other limitations of the self evaluation phase was the fact that the township level supervisors were aware of their supervision goals, and knew that the problems determined by their supervision would be compared to the problems revealed by self evaluation. This awareness affected and changed the form of regular supervisions.

Conducting of quality improvement, and self-evaluation workshops at the same time can also affect the self evaluation meeting, and especially the execution program, and the depth and extent of the revealed problems at the intervention centers. On the other hand, organizing such workshops could also increase the workload of the staff, and confuse the quality promotion

1- This phenomenon falls under the 'enquiring spirit of the group' topic, under the phases of group formation title and as the work-creation phase sub-title.

activities, and have a negative impact on the implementation of the self-evaluation method.