STRATEGIC INFORMATION SYSTEM FOR MUNICIPAL LEVEL PROJECT

NON TRADITIONAL MEASUREMENT TECHNIQUES

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ANTECEDENTS

For years evaluation specialists have been trying to extend the classical evaluation concept, emphasizing a new approach called "oriented evaluation", and developing specific knowledge instruments where the relationship between the achievement of objectives and the means used to reach them is the key concept to the qualitative valuation process.

A purely technological approach allows to say, as the Panamerican Health Organization[1] does: "Evaluation is a systematic way of learning from experience and using the lessons learned to improve current activities and promote better planning by careful selection of alternatives for future action". What is assumed here is a critical analysis of the different aspects of the design and implementation of any program, as well as all actions that amount to it, its pertinency, formulation, efficacy and efficiency, costs and acceptability by all interested parts involved.

An evaluation of these characteristics is a difficult task, particularly when trying to do it on extendend programs where interests are frecuently opposed and agreements hard to reach. Not only the use of quantitative approximations but also qualitative approaches are ways to settle down these frequently found matters. Is in situations of the kind that political effectors have at hand useful criteria and immediate tools, independently from statistical precision, to orient them on the magnitude of problems to be solved.

One of the limitations frequently found is the resistance of managers to be evaluated because that implies the need to discuss about judgements done over their actions. Nevertheless, the main limitation lies on evaluators themselves, who reject the use of new approaches not based on current technologies. Also, evaluators and statisticians often collide when analyzing the validity of methods used to reach criteria and take political decisions.

The validity of this alternative non-probabilistic sampling method, that does not need a variance-calculating procedure, can be verified comparing its results with the confidence intervals for gross estimations obtained from probabilistic proceedings.

In brief, this new approach presents the existence of several ways to identify levels of events or priorities to be solved, without the need to depend only on the requirements of probabilistic statistical methods or data of permanent registration.

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[1] World Health Organization, Health Programme Evaluation: Finding Principles for its Application in the Management Process for National Health Developmet. Health for All Series, No.6, Geneva, 1981. Pg. 5.

Patton[2] emphasizes that this kind of valorative process is of great usefulness when problems need to be studied through its qualitative components. He also adds that these methods need to fulfill some requirements: a) a clear perception of the possibility of situations to change; b) methodological flexibility; c) the multiple roles of a evaluator; and d) a certain dose of creativity.

It seems important to clarify some of these concepts. The first one is related to pragmatism, which facilitates the perception of situations to change and induces the need for new options when: a) the existing ones are too complex; b) they exceed available resources; and c) they are too difficult to operate.

Methodological flexibility is a critical component within oriented evaluations. A permanent questioning of current technologies is essencial when searching for new ways of knowledge, breaking the natural tendency to become attached to already demonstrated concepts. This approach may require to sacrifice some accuracy in order to attain simplicity of implementation and lower costs, among others.

The multiple roles that an evaluator has to perform is a key component not sufficiently delimitted yet. An evaluator is more than a specialist in evaluation; he has to be able to work from the inside with several disciplines, detecting procedures that need evaluation to gain better knowledge about the relationship between applied actions and results obtained.

Another important concept mentioned above is creativity. With it, associations among diverse areas of knowledge can be made obtaining new technological approaches, simplifying the existing process. Besides that, it has to have an additional component, which is, the capability to raid into well-known scenery and prove new points of view, starting their systematic development. In brief, association capability and "transgression" to the already accepted roles become indispensable for creative thinking.

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[2] Patton M.Q.: "Utilization-Focused Evaluation", 2nd. Edition, Sage Publications, Beverly Hills, U.S.A., 1987.

THE NEW APPROACH

The end pursued by this project lies on the comparison between the results obtained by multistage probabilistic sampling and a non-probabilistic sampled area selected by expert's choice related to population structure and characteristics.

One of the important requirements of this new approach is the division of the population to be studied into geographical zones. This division needs to be determined by the judgement of local experts, who know in depth the total population, its geographical distribution, as well as some socio-economic characteristics, of easy detection by observing external traces (shanty towns, dwellings built in private lands, etc.).

This method intends to select sampling areas using simple procedures compared to the ones used for large populations: multistage sampling clusters. The "experts" will be responsible for the selection and to their knowledge. For example, a supervisor of tap water and drainage systems, the president of a neighborhood committee, and neighbors, could all be part of that "expert" group.

A comment must be made here: within the regular data collection, when a central tendency measurement needs to be known, the mean, mode and mediam are used on the assumption that they inform about the values which characterize the majority of its components. When using the arithmetic mean, it represents the value that all the observations might have, being similar to the most frequent value. An equivalent concept could be qualitatively reached. Teams of experts, reaching conclusions by consensus, could determine the internal components of a certain group under study, and obtain results closely and reasonably similar to those obtained by the use of rigorous chance.

The quality of the obtained values may be determined using a group of important variables for comparison. Some of them could be: percentage distribution of population structure to both populations, percentage of population within some criteria (employed, unemployed, underemployed), etc. Another way could be, within standard samples, to use variables that show higher frequencies in the populations: age and sex structure, socio-economic level, etc.

This kind of validation establishes the confidence intervals for each one of the variables used and, afterwards, determines if the estimations fall inside or outside those intervals. If most fall inside the limits, it can be said that the results are good indicators of the reality studied.

It is important to remember that good samples can be representative, according to a predetermined level of confidence, of high frecuency variables. Over the rest, they just give good orientations.

In brief, when results need to orient political decisions, the use of a non-probabilistic method, which gives results similar to those of probabilistic sampling, has proven to have enough power to feed those decisions. Lately, a probabilistic sample can be taken to check up those results.

Consensus is also a key concept when trying to determine the degree of representativeness. It is defined as consent, assent and emphasizes the common agreement among all the persons involved. In situations where qualitative aspects are being considered, and when looking for average or most frequent values of a population, consensus is equivalent to central tendency measurements.

There are other qualitative evaluation procedures, natural components of this process to "average" the values of criteria given by "experts" or key informants. They are: unobtrusive measurements by observation, key informants and community foræ.

1. Unobtrusive Measurements

Valadez[3] emphasizes the use of "unobtrusive measurements" as a qualitative technique for training evaluators. He adds that an unobtrusive method allows discrete measurement of a phenomenon, such as a physical trace or an existing running record, which can be evaluated with acceptable quality when possible bias of the observer can be excluded. In spite of this limitation, it is currently used to a great extent when actualizing sampling frames, where the observation of dwellings and habitat around them represent accurate indicators of the social level of each stratum.

Biased observations can be avoided delimiting clearly all the aspects that will be considered later, and specifying the different classes that each one might have. In this way it seems possible to separate subjective interpretations of the observer, and have objective measurements to evaluate, since there is no need of interaction between observer and informer. It must be stressed that prejudiced observations of the evaluator have to be ruled out.

Non-reactive measurements during the gathering process can be considered, such as physical traces, running records and non-participant observation. A physical trace is an evident proof that can be found in the environment, dwellings, people, and in their activities. The inexistence of tap water within a community is something that can be detected by simple observation, looking how people get it. Running records can be those developed by neighborhood entities, where some attributes of the community members, dwellings or from the environment are kept. They can be formal or informal. Within the first one vital statistics like births and deaths are considered. In the second group local magazines, publications, and the like are included.

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[3] Valadez J.: "Qualitative Methods for Monitoring and Evaluation", Document No.2, PAHO/WHO, HSS-SNIS-27, Washington D.C., June 1988.

The important fact is to always keep in mind all the different bias that can be introduced, not only during the registration process but also from the observer side. For example, if a birth registration costs a fee, the chance of fewer registrations within communities with low socio-economic conditions is to be expected, and must be taken into account. It could also happen that if the observer shows any kind of prejudice when considering the legal marrital status of a couple, answers can be influenced by him.

Valadez[4] affirms that physical traces have high value when used in combination with probabilistic samples because they allow not only the characterization of the areas that have to be studied, but also in accordance with the objectives of the essay.

Uniform and precise defintions are to be clear to all the observers, avoiding that any physical trace could be included into more than one class.

2. Key Informants

Rossi[5] describes the key informants as another important element within qualitative evaluations. He says that any evaluation which includes this technique, has generally low costs, and requires good identification and selection of community informants (leaders, well-respected neighbors, etc.). These persons must have accurate and profound knowledge about the problems or conditions that need to be characterized in order to be able to give valorative judgements.

This selection implies consideration of problems that have to be avoided. For example, the conclusions of the members of the industrial branch when analyzing the equity of the average salaries that they pay could be completely different from those done by the members of the workers union. Thus, selection of key informants is to be carefully done. For other situations, like the identification of the health level of some sanitary posts, even though their subjectiveness, the ones who recieve those health care services are in the best conditions to define them. More over, key informants are highly qualified members when considering the amount of dwellings, or their density among different blocks for redesignment of sampling frames.

Key informants can perform in two different ways: as members of panel discussions, where their activities end when the analysis is over, and as members of a permanent net, where they can remain according to their possibilities. The process of selection of the two is different: for the first situation, key informants need to know in depth the subjects that are going to be analyzed. In the second case, they must be good observers about the problems to be detected.

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[4] Valadez J.: Op. cit.

[5] Rossi P.H., Freeman H.E.: "Evaluation: A Systematic Approach", 2nd. Edition, Beverly Hills, U.S.A, 1982. Pp. 111-112.

Valadez[6] defines key informants as follows: "A key informant is a person that due to his education, physical or social position within the community, etc. has access to some kind of information about its functioning habits and problems of the people. When identified, information can be obtained through interviews, observation of physical traces, etc.".

In this case, it seems important to consider periodical triangulations to reassure the validity and verosimilitude of the information. Cross-validation of these points of view with the ones from other observers seems necessary when it is desired to have a permanent network which provides reliable information.

2.1. Key Informants Networks

The "community informants" should be key informants organized in networks interlaced with the formal social service system. The relation must be undertaken by agents of the formal system acting as mediators and transmissors of detected knowledge to the action areas they are assigned to.

Bidirectionality is an important characteristic that key informant networks must have: informant-mediator-formal system-mediator-informant. Both sides should be in conditions to generate knowledge about a specific situation that needs to be solved.

A net of informants of this nature should be a self-corrective instrument, with constant training of all involved actors: community members, informants and official efectors. It has to be flexible enough to adecuate itself to the changes being done in political management and in the life of the population.

The limits to informants intermeddling private scopes depend upon themes considered, local cultural guidelines and ethic principles agreed between all participants. Informants can be transformed into depositaries of an excessive quantity of knowledge and be raised above the rest of the community members. This should be avoided because it could be wrongly used or missunderstood.

Participation in the net is a voluntary act and so, rotation of members has to be considered in a periodical basis, according to the tasks to be done. For example, some groups of informants are more efficient than others depending on the problem being investigated.

3. Community Forœ

An extension of the key informants approach is a community forum, where the community as a whole is treated like a group of key informants. When an external evaluator assists to one of these events, he is not supposed to participate, but to percieve

[6] Valadez J.: Op. cit. Pp. 7-8.

demmands, differences of criteria among the people, and other situations of the kind.

A common way to promote community foræ is by the use of available local communication services. These can be persons from local entities or social groups, teachers who can call the parents through their pupils, community radios, etc. The important fact here is to have a clear idea of the subject that is going to be analyzed, the results to be reached through the demmands that might arise and, if possible, the benefits that those situations might imply to the community.

4. Dynamics of the Average Group Judgement

The group dynamic of this technique is composed by five stages in which the key informants, or local experts, and the group of coordinators work together. For this specific case, the final goal of the meeting is to identify in a map geographical areas and different socio-economic levels. For this purpose, the experts must vote in silence, without consulting other members of the panel; this is important if personnal criteria is to be obtained. When needed, because the number of units is too large, a second voting for a new selection will be done on the already voted ones. If the number is too small, new units will have to be included in order to reach the correct one.

Once the counting stage is over, the second one goes on with the comments of all the participants analyzing their selections. This exchange of ideas may end with objections to some of the units, and their exclussion if there is consensus on their lack of representativity. The main objective here is to get a list of sampling areas representing the criteria defined for each stratum, obtained by the consensus of the panelists, local experts or key informants.

4.1. Materials Needed Beforehand

4.1.1. Chartographic elements ready. 1) One heliographic map for each geographical unit,in which neighborhoods from each strata are delimited. There must be as much maps as strata. 2) Another group of smaller maps, one for each expert, containing all the blocks of the neighborhood or geographical areas already marked in the bigger map. 3) White sheets of paper and pencils for the experts, and felt tipped markers for the coordinators of the meeting.

4.1.2. The criteria used to select the areas must be placed in front of the group so it can be easily read. It has to be emphasized that the selected blocks should be those whose dwellings and homes are representative for the average of the area.

4.1.3. A flip-chart to write on the selected blocks. Whenever a page becomes filled, it will be torn off and taped on the wall for all to see.

4.1.4. Three persons are needed for each group of experts

or panelists: one acting as the moderator who will read the votes. A second person who will write them in the flip-chart. And a third one to mark on the big map with an "X" all the blocks voted for each neighborhood. Each block will have written inside the number of marks according to the times it has been voted.

4.2. Group's work

The moderator will explain the rules to the group, then he will introduce the members of his team, and finaly he will ask the experts to do the same, indicating the neighborhood or institution they represent.

Then he will hand out paper and pencils to the experts, and will instruct them to be silent during their work. It should also be clear that the experts must not ask questions for other reasons than to clarify doubts, never distracting the rest.

4.2.1. Then the moderator will ask to each expert to select a number of blocks proportional to the total to be identified for each strata. For example, if 50 blocks are needed and the group has 10 experts, each one will have to select 6 blocks. The final count can be slightly higher.

4.2.2. After 15 to 20 minutes of work, the moderator will collect the pages with the votes and start reading to his assistant the voted blocks.

For each neighborhood there will be a page tapped on the wall where the votes will be marked. The votes per expert will be written down. One digit will represent a neighborhood and a second one will correspond to each selected block. This number will be correlatively increasing to simplify recognition of those selected.

4.2.3. Parallel to this, the other assistant will register in the big map with an "X" all the blocks with votes.

4.2.4. Final voting. If the desired number is not reached, a second votation is needed to increase or decrease the figures. In this case, this will be done only with the blocks already voted.

4.3. Analysis of the Votes

4.3.1. Once the registration and counting of blocks is over, the moderator will then ask to the experts to analyze if every block is really representative, and if the distribution of the sampling values is uniform to the whole areas.

4.3.2. This analysis must be registered by someone from the coordinating group. Afterwards, the moderator will thank the participation of the experts, and will remind them to inform their respective neighbors about the future survey in order to assure access to the homes.

4.4. Selection of the Sampling Areas

After the expert's selection it is necessary to assign blocks and sides of blocks to the interviewers. In order to do this, the following steps are needed:

4.4.1. Each member from the coordinating group recieves a number of blocks that needs to be delimited in the sketch prepared for each interviewer.

4.4.2. The amount of sampling areas has to be selected proportional to the size of each one of the strata. The number of areas is divided into blocks and sides of blocks, in order to have an appropiate number of complete blocks. This is considered appropiate, when approximately one third of the sampling areas are complete blocks and are uniformly distributed through the area to be sampled. The total amount of homes that will result from the segmentation, must be similar to the value established as necessary to assure the appropiate analysis of the tables that will be used to test the differences between the probabilistic and non-probabilistic samples.

4.4.3. Once the blocks or sides of blocks are marked, the questionnaires and the corresponding sketches are prepared.

4.4.4. The interviewer's name, questionnaires given, areas to be visited, and dates when material is given and recieved, are registered in the interviewer's work sheet. Other information can be also included and useful for the evaluation of the interviewers and supervisors work.

4.4.5. The whole packet is given to the interviewers without telling them which of the two sampling techniques they are going to develop.

5. Conclusions Over This Methodology

As already stated, the objective of the method is to determine a group of sampling segments with uniform distribution, based on the expert's choice. This has not the theoretical support of the probabilistic techniques, but allows to obtain a group of homes that logically might represent the whole number of dwellings of the neighborhood.

The excellence over the quality of the method will be determined by the place in which the estimations of the great variables fall. If the estimations fall within the variation interval calculated for cluster stages, it could be said that they give reliable estimations to hand out to managers, to support their policies or priorities.

In this situation, it is not important if the indicators used are probabilistic or not. The lack of information about public programs is so big that it seems worse to delay the delivery of estimations because they are not probabilistic.

These final comments do not intend to ignore or disregard the importance or necessity over probabilistic proceedings. They

just want to call the attention of planners, managers, statisticians and evaluators, about new and more rapid ways to approach to reality.

The World Health Organization[7] states that "necessary information does not need to be more precise than the process it supports, approximate and timely information is better than precise but delayed information. Actions must be taken so that those who generate information are informed about the results and decissions to which that information has contributed". This comment is valid but of difficult implementation within programs where operative conditions are not given to allow relations of the kind, and if they exist, can easily deteriorate.

5.1. Comparison of Values Obtained by Both Sampling Methods

5.1.1. Five to 9 Years Old Population

5.1.1.1. Males

Censal Strata	Population	Percent of Total Population	Standard Error	Confidence Interval	Key Informant Estimation
Low	814	6.64%	0.50	5.66-7.62	7.53
Mid B	4,169	5.61%	0.49	4.60-6,49	5.89
Mid A	7,783	5.73%	0.49	4.77-6.69	5.01
High	787	3.34%	0.80	1.77-4.91	3.84
Total	13,553	5.51%	0.32	4.88-6.14	5.32

5.1.1.2. Females

Censal Strata	Population	Percent of Total Population	Standard Error	Confidence Interval	Key Informant Estimation
Low	923	7.53	0.61	4.53-8.73	7.25
Mid B	4,169	5.61	0.50	4.63-6.59	5.33
Mid A	8,291	6.11	0.67	4.80-7.42	4.41
High	590	2.51	0.51	1.51-3.51	4.38
Total	13,972	5.68	0.40	4.90-6.46	4.83

[7] World Health Organization, "Managerial Process for National Health Development", Series Health for All, No.5, Geneva, 1981, Pp. 65-66.

In the tables it can be observed how estimations done by the key informants method fall within the 95% confidence level interval of the probabilisic sample. This alone speaks about the excellence of these estimations as a rapid way to generate the knowledge needed to feedback the process where decisions, with a fair amount of background on local reality, must be taken.

5.1.2. Sixty Five to 69 Years Old Population

5.1.2.1. Males

Censal Strata	Population	Percent of Total Population	Standard Error	Confidence Interval	Key Informant Estimation
Low	63	0.51%	0.21	0.10-0.92	0.01
Mid B	671	0.90%	0.24	0.43-1.37	0.78
Mid A	1,354	1.00%	0.27	0.47-1.53	0.86
High	713	3.03%	0.55	1.95-4.11	1.92
Total	2,801	1.14%	0.18	0.79-1.49	0.90

5.1.2.2. Females

Censal Strata	Population	Percent of Total Population	Standard Error	Confidence Interval	Key Informant Estimation
Low	74	0.61%	0.16	0.30-0.92	0.28
Mid B	671	0.90%	0.22	0.47-1.33	1.44
Mid A	1,777	1.31%	0.35	0.62-2.00	1.25
High	639	2.71%	0.44	1.85-3.57	3.01
Total	3,162	1.29%	0.21	0.88-1.70	1.43

Even though, as seen in the tables, some estimations done by the key informant method do not fall in between the limits of the interval; such deviations can be considered meanless because the method only tryes to "aproximate" knowledge for decision-making situations. It must also be noticed that total values do always fall in the intervals.

In this section, age groups in the extremes of life are considered because they usually present the widest variability, while middle groups generally tend to be more stable.

5.1.3. Employed Population

Censal Strata	Population	Percent of Total Population	Standard Error	Confidence Interval	Key Informant Estimation
Low	3,598	81.98%	1.31	79.4-84.5	79.47
Mid B	23,494	80.02%	2.43	75.3-84.8	79.30
Mid A	45,938	87.16%	1.89	83.5-90.9	86.32
High	8,508	89.87%	2.50	85.0-87.6	84.87
Total	81,539	85.01%	1.31	82.4-87.6	83.76

5.1.4. Unemployed Population

Censal Strata	Population	Percent of Total Population	Standard Error	Confidence Interval	Key Informant Estimation
Low	791	18.02%	1.58	14.9-21.1	20.53
Mid B	5,865	19.98%	2.43	15.2-24.7	20.70
Mid A	6,768	12.84%	1.89	9.1-16.5	13.68
High	959	10.13%	2.50	5.2-15.3	15.13
Total	14,383	14.99%	1.31	12.4-17.6	16.24

5.1.5. Underemployed Population

Censal Strata	Population	Percent of Total Population	Standard Error	Confidence Interval	Key Informant Estimation
Low	458	10.44%	1.79	6.9-14.0	25.41
Mid A	2,473	8.42%	1.67	5.2-11.7	12.83
Mid B	3,215	6.10%	1.64	2.9- 9.3	10.45
High	467	4.94%	1.22	2.6- 7.3	7.89
Total	6,614	6.89%	1.05	4.9- 8.9	11.56

The estimations, at total and detailed level, on employment and unemployment are absolutively appropriate for all strata; estimates are of great similitude. Only the underemployment

subject requires more detailed study, as it was sustaindly over estimated with the key informant method.

5.1.6. Dwellings with Critical Overcrowding

Censal Strata	Dwellings	Percent of Total Population	Standard Error	Confidence Interval	Key Informant Estimation
Low	784	28.33%	3.04	25.5-31.2	50.23
Mid B	2,730	14.23%	2.37	8.3-20.2	21.50
Mid A	2,722	7.18%	2.26	2.5-11.8	6.92
High	223	2.67%	1.30	0.1- 5.2	1.72
Total	6,459	9.46%	1.44	6.6-12.3	12.14

5.1.7. Dwellings with No Bathroom Installation

Censal Strata	Dwellings	Percent of Total Population	Standard Error	Confidence Interval	Key Informant Estimation
Low	1,340	48.41%	4.75	39.1-57.7	53.02
Mid B	5,157	26.88%	3.49	20.0-33.7	28.50
Mid A	3,162	8.33%	2.22	4.0-12.7	7.69
High	28	0.33%	0.33	0.0- 1.0	1.72
Total	6,459	14.19%	1.59	11.1-17.3	14.65

5.1.8. Dwellings Classified as Precarious

Censal Strata	Dwellings	Percent of Total Population	Standard Error	Confidence Interval	Key Informant Estimation
Low	2,147	77.59%	3.70	70.3-84.8	89.30
Mid B	9,473	51.98%	5.69	40.8-63.1	58.50
Mid A	6,850	18.06%	4.94	8.4-27.7	19.61
High	613	7.33%	3.67	0.1-14.2	4.31
Total	19,583	28.69%	3.22	22.4-35.0	31.50

A quick analysis of all these data evidently indicates that "hard" indicators such as the existence or not of a bathroom installed, precarious dwellings (those built with low quality materials) among others, are faithfuly represented applying the key informant method. With indicators where subjectivity has a higher weight, a tendency to magnify negative aspects or precarious components can be noticed.

The first evidence presented brougt out the need to have certain "approximate" information to aid detection of problems that have to be solved. This kind of information can be provided by the key informant sampling or other similar type of data collection and interpretation method, able to provide a faithful approximation, comparable to the one obtained with the classical probabilistic one. Benefits of the key informants includes being less complicated, less expensive, and much more accessible for general investigations.

This new process does not pretend to replace the techniques already proven by classic statistical methods. What it seeks is a faster way to identify situations that require actions to solve community problems.

Methods whose degree of certainty is not known, can not be proposed. A strategy to give values to the level of disparity between measurements and the known reality, should be established. A way to reach this, is to use a sampling method that starts from a relatively small sample, taken with all the technical requirements of the classical statistics, and from there on, with another type of periodical gathering instruments, such as the ones mentioned in this document, or other of the kind. They should be able to provide all the strategic information that each case requires.

This implies three things: 1) technicians should be able to generate on time the necessary information to the decision-making process; 2) leaders (political estaments) should recognize the importance of these instruments, become familiar with them, and be capable to reach a meaningfull comprehension of the contents to them presented; and 3) technicians should be able to lay out all the information in a simple and clear way, so that no "training" would be required to understand their proposals.

6. Combination of Qualitative Methods

A good example of how qualitative methods can be combined was developed by a group of students from the School of Public Health, University of Buenos Aires.

The general objective of the thesis was to emphasize the teenagers participation for the diagnosis of their own problems. The specific objectives were: a) to determine the adolescents' problems from thier own perspective; b) to interview a population with adolescents as interviewers; c) to characterize adolescents' problems from the adults' point of view; and d) to describe adolescents' problems from the experts point of view.

To perform their work the students used a combination of three proceedings: 1) school forœ; 2) interviews to the teenagers who lived and studied within the area of the school, and their mothers (key informants); and 3) weighted group judgement technique for professionals from Education and Health sectors.

Three school forœ were carried on in three selected schools with students from 10 to 14 years old. The other forum was developed in one street, previously agreeded, with youths (approximately of the same age) who practically live in the streets, or spent most of their time there. The results obtained indicated a small discrepancy between children of 10 years old and the elder ones. The latter showed closer perception over their everyday problems, while the former expressed most of theirs related to concepts learned at school or in their homes. For example, subjects like addiction to drugs and AIDS were highly chosen.

The home interviews to the adolescents who assist to school and live with their parents, were done within groups of blocks that the experts chose as representative for the low, middle and high social classes of Berazategui. Each one of the researchers from the Public Health School visited the homes accompanied by an adolescent. While the former was interviewing the mother, the latter was interviewing the adolescent of the home, using a questionnaire designed with his particiation.

The weighted group judgement was performed with professionals from Health and Education sectors (physicians, teachers, psycologists). Results showed coherence with other results gathered after similar meetings developed with different participants.

The triangulation of the results obtained with the different techniques showed overlapping subjects such as: a) physical violence (within the family, among rival groups of youths, and comming from the authorities); b) the need of the adolescents for physical space where they could gather (to play football or do whatever they like during their free time; c) drugs consumption and dependency; and d) a multidisciplinary group which would raise their problems and possible solutions to the authorities (basically from the health and the education formal sectors).

This experience turned up to be highly promissing, and the idea to work with adolescents proved to be a tool of great value which might be incorporated to the interviewing process within this group of age.