INFORMED CONSENT IN CLINICAL RESEARCH AT A GENERAL HOSPITAL IN MEXICO: OPINIONS OF THE INVESTIGATORS

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ABSTRACT

In Mexico informed consent is a legal requirement that ensures that patients who are invited to participate in clinical trials are provided with all the information needed to decide whether to participate, or not, in a research protocol. To improve our understanding of the problems physicians in developing countries encounter, when obtaining informed consent (IC), we examined their opinion on the importance of IC in clinical research, the quantity and quality of the information provided to the participant, and the conditions in which the IC is obtained. Investigators considered that IC was useful to the patients, providing information that helped the patient to make a decision about his/her participation. Nevertheless, they felt that for some aspects of the research, like drug development in general, the use of placebos, and the randomization process, many of the patients were not capable of fully understanding the information provided, referring to the complexity of the information and illiteracy as the main reasons. Many investigators were not acquainted with some of the guidelines established in the Mexican General Law of Health,1 36% of them admitting to not having completed their IC letters. Most investigators gave only minutes to the patient to make a decision and 20% of ICs were obtained while the patient was hospitalized. Except for one investigator, all of them considered that specific training in medical ethics would be useful for the daily clinical work.

Keywords

consent, research protocols, clinical trials, investigators, information supplied in informed consent, general hospital, Mexico

INTRODUCTION

Since the Nuremberg Code\(^2\) was formulated in 1947, other documents have been written with the purpose of establishing legal and ethical guidelines that ensure the dignity, rights, safety and well being of research participants.\(^1\) One of these requirements is that patients who participate in clinical trials must give their informed consent (IC). The IC is a tool to safeguard the patients' legal rights, promoting their freedom to choose different options, including the decision to participate, or not, in research protocols. In Mexico, the General Law of Health defines the IC as the written agreement by means of which a person, or legal representative, authorizes his/her participation in a research protocol, having enough information and knowledge at hand about the protocol in order to make a thoughtful decision, and with the right to decide without any element of force, fraud, hoax, pressure, supervision or any other form of limitation (see appendix). As part of this process, patients must be provided with adequate information regarding the nature, duration and objective of the research, as well as the methods and means to be employed, anticipated benefits and the dangers and risks that may occur as a result of his/her participation in the study.\(^4\) In each health institution, the Local Research and Ethics Committees (LREC) reviews, in detail, the information that must be given to trial participants to ensure compliance with the law.

Medical investigators who conduct clinical trials inevitably form an opinion on the amount of information that they are required to provide to patients as part of the process for obtaining IC, being in a good position to assess patients' comprehension of that information as they are in close contact with them all the time. Nevertheless, it is possible that they may overestimate what their research participants understand. In addition, there might be an issue relating to whether they are interested or not if the patient understands all the information provided. A recent study in several hospitals in Mexico City showed that physicians exercise power and authority over patients in an effort that they perceive as beneficial or preventing harm. In most cases, physicians do not seem to recognize or respect their patients' autonomy; therefore, communication is generally partial and vague.\(^5\) In any case, it is important to learn what investigators think in order to be able to contrast their opinions with those of the patients.

One of the few studies that have considered researchers' views concluded that trial-clinicians were 'quite skeptical' of their patients' ability to understand several aspects of trials, including the study objective, its design, and the randomization process.\(^6\) In contrast, a more recent study performed in the UK reports that investigators generally felt 'that the amount of information required to be given to trial participants was adequate' and that 'most patients had at least a reasonable understanding of key aspects of the clinical trials process'.\(^7\) In a study that analyzed the potential limiting factors impacting on voluntary IC in the Philippines, it was proposed that poverty, extreme need, marginalization, commercialization of medicine and the social power of physicians could make participants unable to freely exercise the principle of voluntary IC.\(^8\) It is of importance to promote a systematic attempt to determine the views of medical investigators in


\(^8\) Ibid. p. 101.

Informed Consent in Clinical Research

METHODS

Participants

The General Hospital, Dr. Manuel Gea Gonzalez is a Public University Hospital of second level of attention, with almost two thousand employees. It has three main objectives: (i) to provide medical attention; (ii) to accomplish research in the health and medical fields; (iii) to collaborate as a teaching institution in the training of professionals, technicians and assistant personnel. As a general hospital, it receives mostly patients from a low-income level, giving attention to those who are not covered by the health security social system. Its main areas of attention are ‘Internal Medicine’, ‘General Surgery’, ‘Pediatrics’ and ‘Gyneco-Obstetrics’. As part of its fundamental task in biomedical, clinical and socio-medical research, dozens of research protocols are entered for review at the LREC each year. For this project, we reviewed the 91 research proposals approved by the LREC during 2002, selecting all 33 that required IC. For each protocol there is a responsible and a principal investigator, the former being a medical doctor (MD) working at the hospital and the latter usually an MD during training in a specialty. Many of the research protocols will give rise to theses in the specialty. Both groups of investigators were invited to complete a questionnaire and to participate in an interview to explore their views about different aspects of IC. In total 45 investigators participated in the study.

Response rate

All the responsible investigators (33) agreed to participate and were interviewed (100% response rate) while only 12 of the principal investigators (36%) were interviewed. Many of the principal investigators left the hospital after completing the clinical protocol, which was a requisite to finish their specialty, making it difficult to contact them for this study. The only principal investigators interviewed were those involved in clinical protocols that were still being carried out at the time of this investigation.

The subjects of study

Of the 45 interviewees, 75% were male, and the predominant age group was 36–45 years. Except for one nurse, all of them were doctors with a specialization. The majority (66%) obtained their MD degree at the National Autonomous University of Mexico and 31% obtained their specialty at the hospital. The clinical trials that required IC ranged from protocols involving infants, new surgical techniques, trials of unlicensed drugs involving small numbers of patients, to phase III trials in which thousands of patients were involved in international protocols.

The questionnaire

The questions that were asked during the interview were based on previously reported questionnaires, modified to local conditions and idiosyncrasies after a deep analysis, and tested in a pilot study before their approval by the LREC. The questionnaire was composed of two types of questions, open ones where interviewees were allowed to freely elaborate their answers, and closed ones, where the interviewee had to choose from pre-fixed answers. We used an interview to apply the questionnaire because it has been shown that this method allows the interviewees to comment more freely about their experiences. Some investigators’ comments are included as quotations in this paper in order to illustrate quantitative data. All investigators were assured that any publication of results would not reveal their identities or confidential details of their

research, and an IC letter was given out to sign, as required by the Mexican General Law of Health.

VARIABLES

Importance of IC in clinical research

Investigators were asked their opinions about how they define IC, the importance it has, and how it affects their relationship with their patients. In order to determine how IC affected the physician-patient relationship, investigators were asked to comment on their views as to: (i) if their relationship with the patients in protocols that require written IC is better or worse than with patients participating in protocols without risk (i.e. retrospective studies) that do not require written IC; (ii) if obtaining the IC favorably (accept to participate) or adversely (reject to participate) affects the compliance of the patient to take part in the research; (iii) if the patients that participate in a research protocol receive more information than those who are not taking part in such protocols; (iv) if the time spent with the patient differed between participants in clinical protocols and those who are not participating in a research protocol.

Amount and quality of information provided to trial participants

In order to assure the right of the participant to decide whether or not to take part in a clinical protocol, investigators must provide information about what the clinical trial is trying to determine, trial procedures (such as how often they will be required to visit the hospital, if they will be required to give blood or to take special medicines, etc), and the possible benefits and risks of participation. Investigators were asked to assess the amount of information that they are required to provide about the following: (i) the purpose of the clinical trial; (ii) the procedures to be used in the course of that trial; (iii) possible benefits from participating; (iv) possible side effects and risks. Potential responses for each variable were: ‘we give too much information’; ‘we give the adequate amount of information’; ‘we do not give enough information’; ‘we do not give any information’; ‘not applicable’.

We also asked investigators to give their point of view about the quality and quantity of the information contained in the IC letter; whether: (i) it gives more information than necessary; (ii) the format is too rigid; (iii) participants find it difficult to understand; (iv) they consider patients are able to comprehend the information provided. It is important to note that it is the responsible investigator who elaborates the IC letter of the research protocol, following the guidelines established in the Mexican General Law of Health (see appendix).

Participants’ understanding of the information provided by the investigator

Investigators were asked about their perception of patients’ understanding of each of the following: (i) the purpose of clinical trials; (ii) trial procedures; (iii) potential side-effects; (iv) drug development in general; (v) the use of placebos; (vi) the randomization process; (vii) the meaning of ‘controlled’ trials. Potential responses for each variable were: ‘fully understanding’; ‘reasonable understanding’; ‘little to no understanding’; ‘not applicable’.

Conditions under which IC is obtained

The Mexican General Law of Health establishes, among other things, that the responsible investigator must write the IC letter. This letter is later reviewed and approved or rejected by the LREC. A copy of the IC letter must be given to the participant or legal representative and the investigator should keep all the information related to the protocol for at least five years. We asked the investigators about who was in charge of obtaining the IC for the protocol, and if they fulfilled all the requirements specified by the law. Finally, they were asked about how much time they gave the participants to decide if they were willing to take part in the protocol or not, and the place where they usually give the participants the IC letter to sign. Although the law does not establish the length of time or place for obtaining the IC, in order to accomplish a full decision-making process, enhancing the participant’s ability to exercise their right to choose, the time and place are critical.
RESULTS

Responses to individual questions were divided into three categories: (i) investigators’ views of the importance that IC has for research, and for the physician-patient relationship; (ii) the amount and quality of the information provided to participants and their understanding of that information; (iii) conditions under which the IC is obtained. Results were compared by gender, age and group (responsible or principal investigator) using cross-tabs and chi-square tests. No significant differences were observed in the compared groups, probably due to the sample size.

Importance of IC in research and in the physician-patient relationship

As Table 1 shows, all the investigators, except one, considered that the purpose of IC is to provide the patient with the information needed in order to make an understanding and enlightened decision of whether to participate or not in a clinical protocol. The purpose of informed consent is to protect the investigator in case of a legal controversy.

Table 1. Investigators’ Perception of the Importance of Informed Consent in Research, and in the Physician-Patient Relationship

|                                           | Affirmative N (%)
|-------------------------------------------|-------------------
| The purpose of informed consent is to provide enough information in order to enable the participant to make an understanding and enlightened decision of whether to participate or not in a clinical protocol. | 44 (98) |
| Informed consent is useful for participants. | 38 (84) |
| Do you consider participants are able to comprehend the information provided in the letter for informed consent. | 30 (67) |
| My relationship with the participants in protocols that require written IC is different than with those participating in protocols that do not require the written IC. If yes, specify: | 18 (94) |
| – For Better | 1 (6) |
| The participants that take part in a research protocol receive more information than those who are not participating in such protocols. | 33 (73) |
| Informed consent required that I spend more time with participants that take part in a research protocol than those who are not participating in such protocols. | 36 (80) |
| Obtaining the IC affected the conformity of the participant to take part in the research. If yes, specify: | 29 (64) |
| – Favorably | 12 (42) |
| – Adversely | 17 (38) |

All figures are given to the nearest whole number.
N = 45 in each case.

11 Guidelines for the General Rights of the Patients. As part of the National Campaign for a Health System of Quality, the Health Ministry issued the following Decalogue, which has legal founding on the different legal ordinances of the Mexican Law. This Decalogue should be displayed in a visible place at all public health institutions. The patient has the right to: (i) receive adequate medical attention, (ii) receive a dignified and respectful treatment, (iii) receive sufficient, unambiguous, opportune, and truthful information, (iv) decide without coercion about his treatment, (v) give or not his informed consent, (vi) be treated confidentially, (vii) receive all the facilities to obtain a second opinion, (viii) receive immediate medical attention in the case of an emergency, (ix) have a clinical file and (x) dispose of legal assistance in case of non-conformity with the medical staff.
that the feeling of usefulness is related to the ability of the participant to comprehend the information provided. On the other hand, although 84% of investigators considered IC useful, only 67% believed that participants were able to fully comprehend the information provided in the letter of IC.

In relation to the physician-patient relationship (Table 1), when asked if their relationship with the patients in protocols that require written IC was different (for better or worse) than with patients participating in protocols that do not require written IC, 42% said it was different, of these 94% thought it was better, as was explained with comments such as ‘in protocols where IC is required, the participation of the patient is promoted, fostering his/her involvement and collaboration’, ‘as more time is spent with them in explaining the information contained in the IC letter, they acquire a sense of security and the feeling that the physician is concerned for the patient’s health’. Furthermore, 73% considered that more information is given to participants in clinical protocols, and 80% believed that they spend more time and had more interviews with them than those who are not participating in such protocols. It is important to clarify that even in research where no IC is required (i.e. protocols involving questionnaires, interviews, and/or epidemiological research, see appendix article 17) the researcher may also be the attending physician for the patient, therefore, having personal contact with the participant. When asked if obtaining IC affected the conformity of the patient in agreeing to participate in the research, 64% considered that the conformity was affected; from these, 58% thought it was adversely affected. That is, after giving enough information for the participant to decide whether to participate or not in the clinical protocol, more than a half exercised their free power to refuse.

### Table 2. Assessment on the Amount of Information that Investigators are Required to Provide

<table>
<thead>
<tr>
<th>How would you rate the amount of information given</th>
<th>Too Much N (%)</th>
<th>Adequate Amount N (%)</th>
<th>Not enough N (%)</th>
<th>Not given N (%)</th>
<th>Not applicable N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>About the purpose of the trial</td>
<td>10 (22)</td>
<td>35 (78)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>About the procedures used</td>
<td>10 (22)</td>
<td>32 (71)</td>
<td>2 (4)</td>
<td>1 (2)</td>
<td>-</td>
</tr>
<tr>
<td>About potential benefits</td>
<td>10 (22)</td>
<td>30 (67)</td>
<td>5 (11)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>About potential side effects and risks</td>
<td>12 (27)</td>
<td>25 (56)</td>
<td>7 (16)</td>
<td>-</td>
<td>1 (2)</td>
</tr>
</tbody>
</table>

All figures are given to the nearest whole number. N = 45 in each case.

For each of the variables of purpose, procedures, possible benefits and potential side effects and risks, the majority of the investigators felt that the information that they were required to give to patients was the ‘adequate amount’ (Table 2) ranging between 56% and 78%. Around 25% considered that the information given was ‘too much’, comments made were ‘the pharmaceutical companies require that a great amount of information should be provided to the participants, including letters of informed consent of dozens of pages’, ‘because it is a clinical protocol, we must describe in detail every single aspect of the research’. It is worthy of mentioning that 16% of participants thought that not enough information about side effects and risks was given (Table 2). A question that arises from this information is whether investigators are withdrawing this information purposely to avoid scaring the patient, or if the IC letter is not correctly composed.

When, instead of giving investigators the option to rate the quantity of information they provided, they were asked directly if the IC letter gave more information than necessary, 43%, that is almost double of those who assessed the information provided to participants as ‘too much information’, considered that the information was excessive. This contradiction is very interesting, as it seems that when investigators evaluate the information they need to provide separately, they rated it as the ‘adequate amount’, but questioned about overall information in the IC letter, the same investigators now considered it excessive. They also consider that the format of the letter established by the law is too rigid to be useful (49%) and comprises too much information.
to be easily understood by the participants (80%). Nevertheless, as shown in Table 1, 67% of investigators believe that participants comprehend the information provided in the IC letter, referring that they take enough time to explain and answer questions to the patients, attitude that improves the understanding of the information by the participant, even when s/he does not comprehend the written information in a first instance. Typical comments were ‘the IC letters provided by the pharmaceutical companies are filled with technical terms’, ‘information should be put in a context that makes sense to the participant’, and ‘the language of the letter of IC needs to be more simple and colloquial’.

**Participant’s understanding of the information provided by the researcher**

Table 3 shows that the investigators considered most of their patients fully or reasonably understand the nature, purpose and procedures of clinical trials. The least understood aspects were concepts such as ‘controlled trials’ and ‘randomization’ – 7% and 9% of the investigators, respectively. These percentages increased to 8% and 12% when those participants for which the question is ‘not applicable’ were eliminated. Some investigators claimed these concepts were especially complicated to explain. One researcher used the example of ‘flipping a coin in the air to exemplify probability and chance’; this is an example of how difficult it is to explain concepts related to randomization. When asked about which factors could affect participants’ comprehension of the information, investigators mentioned: ‘to improve the technique for explaining information’, ‘to make the IC letter more adequate to the level of literacy of the participants as it is usually too complicated for them’, ‘to design alternative methods (like pictographs) for explaining the IC letter to patients who are illiterate or have problems in reading complex texts’ and ‘to have more time to explain to them’.

**Conditions under which IC is obtained**

When the investigators were asked about who was responsible for obtaining the IC, 60% answered that they were responsible (Table 4). However, when questioned if they give the responsibility for obtaining the IC to other members of their research group, the response rate was the same. One explanation is that the responsible investigators sometimes obtain IC by themselves and sometimes leave this responsibility to the principal investigator. Alternatively, as 33 of 45 of the participants were investigators responsible for the protocol, it seems that although they believe the correct answer should be for them to have the responsibility, in practice they are leaving it to the principal investigator.

Regarding keeping IC letters, 64% of the investigators referred to having all IC letters. In some cases, the responsible investigator indicated that the principal investigator was the person in charge of safeguarding the IC letters, but when asked about the letters some commented: ‘I throw them away as I was never told I had to keep them’, ‘when I finished the protocol, I lost track of the letters of IC’, ‘although I explained to the participant all the information concerning the protocol, I forgot to ask s/he to sign the written consent’. This lack of communication between responsible and principal investigators affected the procedure of giving a copy of the IC letter to the participant. Only 16% of the

<table>
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<tr>
<th>How would you rate participants’ understanding</th>
<th>Fully understands N (%)</th>
<th>Reasonably understands N (%)</th>
<th>Little to no understanding N (%)</th>
<th>Not applicable N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>About the purpose of the trial</td>
<td>18 (40)</td>
<td>27 (60)</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>About the trial procedures</td>
<td>25 (56)</td>
<td>19 (42)</td>
<td>–</td>
<td>1 (2)</td>
</tr>
<tr>
<td>About potential side effects and risks</td>
<td>16 (36)</td>
<td>27 (60)</td>
<td>1 (2)</td>
<td>1 (2)</td>
</tr>
<tr>
<td>About the meaning of ‘controlled’ trials</td>
<td>15 (33)</td>
<td>20 (44)</td>
<td>3 (7)</td>
<td>7 (16)</td>
</tr>
<tr>
<td>About drug development in general</td>
<td>8 (18)</td>
<td>14 (31)</td>
<td>2 (4)</td>
<td>21 (47)</td>
</tr>
<tr>
<td>About the use of placebos</td>
<td>9 (20)</td>
<td>13 (29)</td>
<td>2 (4)</td>
<td>21 (47)</td>
</tr>
<tr>
<td>About the randomization process</td>
<td>11 (24)</td>
<td>18 (40)</td>
<td>4 (9)</td>
<td>12 (27)</td>
</tr>
</tbody>
</table>

All figures are given to the nearest whole number.

N = 45 in each case.
interviewees fulfilled this requirement. However, it is important to note that 62% assured that participants read the IC letter before signing it. When the participant was illiterate or had difficulties reading, one investigator stated ‘I carefully explained the contents of the letter to the participant’.

In relation to the time given to the patient to read the letter of IC and to decide whether to participate or not, most investigators (93%) gave minutes to the participant to decide. About two thirds (60%) of IC was obtained at the medical office whereas 20% was obtained while the patient was hospitalized (Table 4).

Finally, only 22% of investigators mentioned having received special training for obtaining IC (Table 5); however, 49% referred to having taught others on how to obtain the IC. When asked about previous training in ethical issues only 34% mentioned they have taken formal courses on medical ethics during their training as MDs and all investigators, except for one, considered that specific training in medical ethics could be useful in their daily clinical work.

### DISCUSSION

Few studies have sought investigators’ views on the conditions under which IC is obtained in developing countries. In this study, we asked the investigators about several aspects of the process for obtaining the IC. Some problems for fulfilling the legal requirements were identified: (i) not giving to sign the IC letter to the participants; (ii) not keeping IC letters for as long as the law establishes (usually 5 years); (iii) not giving a copy of the IC letter to the participant. Over 90% of the investigators gave only minutes to the patients to decide whether to participate. Although there is no legal definition about the length of time required to give a potential trial participant to decide whether to consent, it is well known that time to consider and discuss with partners or relatives without coercion is relevant in deciding. A recent study on the experience of Brazilian researchers, gave similar results to our own investigation.\(^\text{12}\) Only 30% of the investigators gave the participants time to decide about entering the protocol, and 40% did not give them a copy of the IC letter.

In relation to the place where IC was obtained, 20% of the investigators referred to having obtained the consent while the patient was hospitalized (Table 4). In relation to the place where IC was obtained, 20% of the investigators referred to having obtained the consent while the patient was hospitalized (Table 4).


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**Table 4. Conditions under which Informed Consent is Obtained**

<table>
<thead>
<tr>
<th>Affirmative N (%)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I am responsible for obtaining the informed consent of the participants</td>
<td>27 (60)</td>
</tr>
<tr>
<td>I give the responsibility for obtaining the IC to other members of my research group</td>
<td>27 (60)</td>
</tr>
<tr>
<td>I have all the letters of consent signed by the participants of my protocol</td>
<td>29 (64)</td>
</tr>
<tr>
<td>I give a copy of the letter of IC to the participants of the protocol The participants read the letter of IC before they sign it</td>
<td>7 (16)</td>
</tr>
<tr>
<td>– Always</td>
<td>28 (62)</td>
</tr>
<tr>
<td>– Sometimes</td>
<td>13 (29)</td>
</tr>
<tr>
<td>– Never</td>
<td>4 (9)</td>
</tr>
<tr>
<td>Approximate time I give participants to read and sign the letter of IC</td>
<td>42 (93)</td>
</tr>
<tr>
<td>– Minutes</td>
<td>2 (4)</td>
</tr>
<tr>
<td>– Hours</td>
<td>1 (2)</td>
</tr>
<tr>
<td>Place where patients read and sign the letter of IC</td>
<td>31 (61)</td>
</tr>
<tr>
<td>– Consulting office</td>
<td>3 (6)</td>
</tr>
<tr>
<td>– Hospital bed</td>
<td>10 (20)</td>
</tr>
<tr>
<td>– Waiting room</td>
<td>6 (12)</td>
</tr>
<tr>
<td>– Other (e.g. operating room)</td>
<td>1 (2)</td>
</tr>
</tbody>
</table>

All figures are given to the nearest whole number. N = 45 in each case.

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**Table 5. Previous Training on Ethical Issues**

<table>
<thead>
<tr>
<th>Affirmative N (%)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I have taken at least one course on medical ethics</td>
<td>15 (34)</td>
</tr>
<tr>
<td>Courses or seminars on medical ethics would be useful for my profession</td>
<td>43 (96)</td>
</tr>
<tr>
<td>I have received special training for obtaining the informed consent</td>
<td>10 (22)</td>
</tr>
<tr>
<td>I have taught others on how to obtain the informed consent</td>
<td>22 (49)</td>
</tr>
</tbody>
</table>

All figures are given to the nearest whole number. N = 45 in each case.
Informed Consent in Clinical Research

In this study, we also asked investigators to assess the amount of information that they are required to provide to the patient. In our hospital, it is the responsible investigator, the person in charge of composing the IC letter, following the guidelines established by the Mexican General Law of Health. Therefore, it was interesting to find out that one fifth of the investigators who responded our questionnaire thought too much information was given to the patient, and that 16% thought that not enough information was being given relating to potential side effects as, in general terms, they select the information to be provided. We also asked the investigators to give their opinion on the participants’ level of understanding. Although it is possible that investigators may overestimate what their research participants understand, their perception is important as it may influence how much time and effort the investigator will devote to explaining IC to the patient. In one of the few studies that have considered researchers’ views, investigators felt participants were unable to understand several aspects of trials, but a more recent study showed that researchers felt that most patients had at least a reasonable understanding of key aspects of the clinical trials’ process. Differences observed in the literature may reflect the cultural and educational context of the countries where those studies have been conducted. In the case of our study, 67% of the investigators considered that patients reasonably understood the information provided to them even though many of the patients were illiterate or had only very basic writing-reading capabilities. This can be explained by the time and effort investigators invested in potential participants, as 73% and 80% of the investigators reported that they had given more information and spent more time, respectively, with those patients who were participating in protocols requiring IC. One concern for the LREC was that there could be a misconception that a verbal IC does not require the same time and effort for explaining to the patient the conditions of the protocol, as is required for the written IC. Therefore, since January 2004, at our hospital, it has been compulsory that all minimum risk protocols have a written IC. Whether the perceptions of the patients are similar to those of the investigators is an issue that also needs to be investigated.

RECOMMENDATIONS

By assessing the investigators’ views, we were able to identify areas that need to be strengthened or revised. For example, there is a need for clinical investigators to better understand the Mexican General Law of Health; in particular those chapters related to clinical investigation and IC. With this intention, informal talks, seminars and conferences will be scheduled for investigators in topics related to laws and guidelines on clinical research, including informed consent. In addition, it is important to assure IC letters are safeguarded. In this respect, responsible investigators need to be made aware of their liability. Although, for some researchers, legal matters remain of more concern than ethical matters, in general there was concern on the need to place more emphasis on the ethics involved in research. This is reflected in the fact that many investigators suggested the need to schedule more seminars and courses on medical ethics at the hospital.

Some investigators also referred to having difficulties composing the IC letter for their protocols, especially in relation to using more ‘simple’ and non-technical terms. A general guide is being prepared to help investigators in the preparation of the letter, together with cartoon brochures and pamphlets that will help the investigator to explain complex concepts like ‘consent’ and ‘clinical research’. In the case of pharmaceutical IC letters, which are typically very long and in a language not usually adjusted to address the prevailing local conditions, the LREC is requesting that a one page IC letter written in simple terms be included. A more proactive LREC could help in reducing many shortcomings on the part of the researchers. For example, by means of closer monitoring of on-going research, by promoting that all investigators fulfill legal and ethical aspects of research, by establishing more detailed standardized procedures.

15 Verheggen, op. cit. note 6.
16 Ferguson, op. cit. note 7.
It is clear that there is still much to do to advance the procedure for obtaining IC, especially in relation to adapting the procedure where vulnerable populations are involved. Future studies should be directed to focus simultaneously on the perception and practices of investigators and of the patients involved in research.

APPENDIX 1

Mexican General Law of Health, 2000

Regulations of the Mexican General Law of Health on the subject of health research (Published on January 6, 1987)

First Title ‘General Layout’

Article 3

Health research comprises the development of actions that contribute to:

I. The knowledge of the biological and psychological processes in human beings;

II. The knowledge of the relationship between causes of disease, medical practice and social structures;

III. The prevention and control of health problems

IV. The knowledge and assessment of the harmful effects of the environment in health;

V. The study of the techniques and methods that are recommended or employed in health services and,

VI. The production of materials for health

Second Title ‘Of Ethical Aspects of Research in Human Beings’

Chapter 1

Article 13

In every research in which humans are the subjects of study, respect of dignity and protection of their rights and well being are the criteria that should prevail.

Article 14

Research performed in human beings should be performed in agreement with the following basis:

(1) It should strictly follow the ethical and scientific principles that justify the research

(2) It should be based upon previous experience obtained from lab work, research in animal models or other scientific facts.

(3) It should take place only when there is no other way of obtaining the same knowledge.

(4) Expected benefits should always outnumber expected risks

(5) It should have written informed consent from the subject of research, with exceptions clearly stated in the present rules

(6) It should be performed by health specialists stated in paragraph 114, with the sufficient knowledge and experience that can warrant the integrity of human beings, and under the responsibility of a health institution, acting under the supervision of sanitary authorities. It should have the human and material resources needed to guarantee the well being of the subjects of study

(7) It should be approved by the research, ethics and, when necessary, bio-safety, committees.

(8) It should have the authorization of the director of the health institution.

Article 15

When experimental design of a research conducted in humans considers several groups, probability methods must be used in the selection of the members of each group and the appropriate measures should be taken to avoid any risk or possible hazard to study subjects.

Article 16

In research conducted in humans the privacy of each individual should be kept, identifying participants only when results require it and the subject authorizes it.

Article 17

The probability that the subject of study suffers any damage as an immediate or long term consequence
of the research should be considered a risk of the research. For the present rules, research is classified in the following categories:

1. Research without risk: studies that employ techniques and methods of documentary retrospective review or do not perform any physiological, psychological or social intervention on research subjects, and include questionnaires, interviews, review of clinical files, and others in which no conduct sensitivity is included.

2. Minimum risk research: prospective studies which record data through common procedures in physical or psychological exams for diagnosis and treatment which can include: weighting the subject, hearing exams, electrocardiograms, thermograph tests, excretion collection, placenta or amniotic fluid collection, saliva or teeth extracted by therapeutic advise collection, dental plaque or kidney/liver stones extracted during non-invasive procedures, hair and nail removal not causing any disfiguration, blood extraction no exceeding 450ml bimonthly and with a maximum frequency of twice a week, but not during pregnancy, moderate exercise in healthy individuals, psychological tests performed in individuals or groups in which conduct of the subjects is not manipulated, research with medications of common use, authorized for sale and using the dosage, accepted way of use and not being research drugs defined in paragraph 65.

3. Higher than minimum risk research: are those in which risk of affecting the subject are meaningful and are considered between: radiological and microwave studies, trial of drugs defined under paragraph 65, surgical procedures, blood test exceeding 2% of total volume in just-born babies, amniocentesis and other invasive techniques or procedures, those which use probability selection for therapeutic treatments and those which use placebos, among others.

Article 20

It should be understood as an informed consent to the written agreement through which the research subject or his/her legal guardian explicitly authorizes freely and willingly his/her participation in the study with full knowledge of the nature of the procedures and risks to be undertaken.

Article 21

For an informed consent to be considered viable, the study subject or his/her legal guardian should receive a clear and complete explanation in a way that he can understand it, at least of the following issues:

1. Justification and objectives of the study
2. Procedures to be undertaken and their purpose, including the identification of those which are experimental
3. Expected risks or side effects
4. Benefits that can be obtained
5. Alternative procedures which can be beneficial for the subject
6. Guarantee to receive full explanation to any question regarding the procedures, risks or benefits or any other matter related to the research or treatment
7. Freedom to withdraw his/her consent at any moment and leave the study, without any prejudice to continue receiving care and treatment
8. Guarantee that his/her identity will be kept secret and that the information regarding his privacy will be confidential
9. Commitment of giving the patient updated information obtained during the study, in spite this might affect the willingness of the patient to continue participating
10. Availability of medical treatment and compensation to which the patient has legal rights by the health institution in case of damage directly caused by the research
11. If additional expenses arise, they will be covered with the research budget.

Article 23

In minimum risk research the ethics committee, because of justified reasons, could authorize the informed consent not to be obtained in a written form, and in case of research without risk the investigator can be absolved of obtaining an informed consent. Word count: 998.