English

Telehealth based on the Universal Declaration on Bioethics and Human Rights – grants for universality of health

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Abstract

Aim: analyzing the practices developed on telehealth, based on the Universal Declaration on Bioethics and Human Rights, according to the perception of Pernambuco Federal University Telehealth State Center professionals, component of Ministry of Health Brazil Telehealth Networks Program. Methods: this is a descriptive and exploratory study, with a cross-sectional design. The research carried out with a survey answered by 16 professionals from teleconsultation and 14 from tele-education. The data analysis includes descriptive statistics techniques for the quantitative data and content analysis for qualitative data. Results: complicator and facilitator factors that influenced the actions were pointed out and a discrepancy concerning the interaction between professionals because it was considered sometimes as an advantage and sometimes a disadvantage. The attended declaration principles were: equality, justice and equity, non-discrimination and non-stigmatization, respect for human vulnerability and personal integrity, sharing of benefits. The remaining principles need actions in order to attend them fully and to guarantee respect for human dignity and human rights. Conclusion: new researches are required to know the progress of the other telehealth state centers, providing subsidies to the program management, to continue the undertaking of actions that guarantee the health care universality.
Keywords: *Telehealth; Health Services Accessibility; Bioethics.*

Resumen

Telesalud basada en la Declaración Universal sobre Bioética y Derechos Humanos - subvenciones para la universalidad de la salud.
Objetivo: analizar las prácticas desarrolladas en telesalud, basado en la Declaración Universal sobre Bioética y Derechos Humanos, según la percepción de profesionales del Núcleo de Telesalud de la Universidad de Pernambuco, componente del Programa Telesalud Brasil Redes del Ministerio de Salud. Métodos: estudio descriptivo y exploratorio, transversal. La investigación se desarrolló por medio de cuestionario respondido por 16 profesionales oriundos de teleconsultoria y 14 de teleducación. El análisis de datos incluyó técnicas de estadística descriptiva para datos cuantitativos y análisis de contenido para cualitativos. Resultados: fueron señalados aspectos facilitadores y dificultadores que influenciaron las acciones y una discrepancia relacionada a la interacción entre los profesionales, siendo considerada a veces como ventaja y, a veces, como desventaja. Los principios de la declaración atendidos fueron: igualdad, justicia y equidad, no discriminación y no estigmatización, respeto de la vulnerabilidad humana y la integridad personal, aprovechamiento compartido de beneficios. Los demás necesitan acciones para ser integralmente atendidos y así asegurar el respeto a la dignidad humana y los derechos humanos. Conclusión: nuevas investigaciones son necesarias para conocer el progreso de los demás núcleos, trayendo subsidios a la gestión del programa para continuar el emprendimiento de acciones que aseguren la universalización de la salud.
Palabras-clave: *Telesalud; Accesibilidad a los Servicios de Salud; Bioética.*

Resumo

Telessaúde com base na Declaração Universal sobre Bioética e Direitos Humanos – subsídios para universalidade da saúde.

Objetivo: analisar práticas desenvolvidas em telessaúde, com base na Declaração Universal sobre Bioética e Direitos Humanos, segundo a percepção de profissionais do Núcleo de Telessaúde da Universidade de Pernambuco, componente do Programa Telessaúde Brasil Redes do Ministério da Saúde. Métodos: trata-se de um estudo descritivo e exploratório, com delineamento transversal. A pesquisa se desenvolveu por meio de um questionário respondido por 16 profissionais oriundos de teleconsultoria e 14 de tele-educação. A análise de dados incluiu técnicas de estatística descritiva para os dados quantitativos e análise de conteúdo para os qualitativos. Resultados: foram apontados aspectos facilitadores e dificultadores que influenciaram as ações e uma discrepância relacionada à interação entre os profissionais, sendo considerada, às vezes, como vantagem e, às vezes, como desvantagem. Os princípios da declaração atendidos foram: igualdade, justiça e equidade, não-discriminação, não-estigmatização, respeito pela vulnerabilidade humana e pela integridade individual, compartilhamento de benefícios. Os demais necessitam de ações para serem integralmente atendidos e, assim, garantir o respeito à dignidade humana e aos direitos humanos. Conclusão: novas pesquisas são necessárias para conhecer o andamento dos demais núcleos, trazendo subsídios à gestão do programa para continuar o empreendimento de ações que garantam a universalização da saúde.

Palavras-chave: *Telessaúde; Acesso aos Serviços de Saúde; Bioética.*

Introduction

Lima et al. [1] report that telehealth has great advantages in the Brazilian context, such as improving care in remote regions, where access to health services is precarious. The Unified Health System (SUS), created to guarantee the universality and fairness of care to the Brazilian population, does not always overcome the great distances and the geographic difficulties of access. Therefore, the Ministry of Health (MoH) implemented the National Program Telehealth Brazil Networks that develops actions to support healthcare and permanent education of professionals in the Family Health Strategy. This program has a national scope, through state and inter-municipal centers, offering teleconsultancy, telediagnostic, second formative opinion and tele-education[2].

However, the quality of care is not restricted to the technical questions, but also encompasses the way of the participants engage in the process, referring to relational issues. The humanization of health care has been widely defended and in Brazil is grounded in the development of bonding relationships, where the actions are based on the collaborative relationship between the team and the community.

There are factors that interfere in this process, as in the case of professionals who, even wishing to have a good performance, suffer the influence of adversities of everyday distorting their performance. Despite the countless impasses that may occur, it is necessary for the professional to consider the needs of the person with whom he relates. Any care puts two people on the scene. However, in the telehealth, there is a screen attached to an electronic device (computer), which mediates the interaction. It shoud also be noted that the professional who attends in the remote region seeks technical support from another professional in his area, but who is unknown to him or who does not maintain a relationship. The relationship tends to be punctual, limiting itself to questions and answers.

Then, the dynamics established between the profesional who takes part at a distance and who takes part in person can be a great obstacle in this process, given the possibility of occurrence of situations that interfere in the realization of the procedures necessary to intervention. Thus, Telehealth has relevant issues to be investigated, which can directly affect the quality of care for the communities that use this tool.

Bioethics is an area of knowledge that contributes to the approach of issues related to biological sciences and health, as it seeks to reflect on the questions involved, making it possible to construct consensus regarding each situation. In Brazil, due to the enormous social inequality, it is necessary that the reflections on health practices contemplate the social, cultural, economic and environmental aspects involved, as advocated by the Universal Declaration on Bioethics and Human Rights (UDBHR) [3].

Thus, the aim of this study was to analyze practices developed in telehealth, based on the UDBHR, according to the perception of professionals who worked in a Telehealth nucleus linked to the National Program Telehealth Brazil Networks.

Methods

A cross-sectional, descriptive and exploratory study was carried out, authorized by the Ministry of Health (MoH) and approved by the Research Ethics Committee of the Faculty of Health Sciences of the University of Brasília (CAAE nº 18290213.5.0000.0030).

The telehealth nucleus of the Federal University of Pernambuco (UFPE) was chosen because it represents na intermediate reality between the most developed regions of the country (South and Southeast) and the least developed (North) and because it has been working since 2003, presenting maturity and good development since its founding.

Sixteen professionals involved in Teleconsultancy –nine teleconsultants and seven teleconsultancy applicants – and fourteen professionals involved in tele-education - seven tele-educators and seven students participated in the study.

Data collection was done through a questionnaire, with open and closed questions, to investigate how the actions

were developed, how the interaction between the professionals was made, facilitating and complicators aspects and whether the procedures were successful, according to the perception of these professionals.

For the analysis of the results, descriptive statistical techniques were used in the quantitative data and floating reading of the answers to the open questions to identify categories and their frequencies and analyzed through content analysis. The data were also confronted with the literature.

Results and Discussion

Telehealth was recently adopted by the Ministry of Health, which explains the fact that the professionals who participated in this study had little time of work (most of them worked for a maximum of five years). Most participants were between 24 and 39 years old, probably because they were the age group of people belonging to a generation more familiar with the use of information technology and communication (Table 1). This statement is supported by the study by Oliveira[4] who verified, in the implantation of the nucleus of the UFPE, the need for training with a view to the digital inclusion of professionals not accustomed to computer use.

Table 1 - Distribution of professionals according to age and time of work in telehealth.

	Professionals				Time of Work in Telehealth			
Age (in years)	**Teleconsultor**	**Applicant**	**Tutor**	**Student**	**Up to 11 months**	**1 to 5 years**	**6 to 12 years**	**Did not inform**
24 a 28	3	-	1	-	2	1	-	-
29 a 39	5	3	4	6	3	10	-	1
40 a 49	1	3	2	1	-	3	1	3
50 and more	-	1	-	-	-	1	-	-
Total	9	7	7	7	5	15	4	4

Source: field survey.

The professionals considered that telehealth presents advantages (Table 2) and disadvantages (Table 3), which is compatible with reports of literature[5]. The improvement of training/formation is one of the advantages cited by most participants, as this tool allows access to data from scientific publications worldwide, as well as to carry out courses, attend lectures and conferences offered to distance[5]. The second formative opinion also offers this possibility[2]. Being better qualified or receiving guidance from specialists, the professional improves his work quality and perfects the clinical practice. However, there must be adequate equipment and network, otherwise it is not possible to carry out the communication and, therefore, none of these distance activities. Therefore, the lack of infrastructure is a disadvantage of telehealth, mentioned in literature[5,6] and by the majority of the participants in this study. If the possibility of damage is greater than benefits, it is preferable not to do so to prevent distortions in communication bring more damage than benefits, respecting the principle of UDBHR[4] about benefit and damage.

Other advantages mentioned were the optimization of the time of professionals and health care to the population and reduction of expenditures, as observed in other studies[5,7]. It was also pointed out as advantages the reduction of the distance of the most advanced centers and the offer of convenience to the beneficiaries, who do not need to move to obtain what they need[1,5]. In places where managers do not value the program, there are disadvantages such as lack of support[4] and the time limit so that professionals from telehealth points can devote themselves to the program.

A specific disadvantage of the tele-education was mentioned, which is the need for the student's dedication. The culture of traditional education is impregnated in people, where the teacher is the main responsible for conducting the class and the students passively attend[8]. It is suggested that tutors use strategies that empower students, so that they are active and also responsible for the teaching-learning process. Thus, the program will meet the principle of UDBHR of solidarity and cooperation, where tutors and students act together to achieve the common objectives[3].

Table 2 - Categories related to perceived advantages of telehealth, according to reports from teleconsulting participants (TCS), professional applicants (APP), tele-educators (TUT) and students (STU).

Categories	Professionals		Examples of reports : teleconsulting and applicants
	TCS	APP	
Improvement of Professional Training	7	3	*"Allows greater access to health professionals for qualification" (TCS)* *"there is substantial improvement in the training of professionals who use this tool" (APP)* *"clarify everyday situations"*
Improvement of clinical practice	5	4	*"offer of actions that help in the conduct of clinical practice" (TCS)* *"assists in the performance of daily activities" (APP)*
Greater effectiveness of actions	5	-	*"optimizes the resuscitative power of the BUH in the health / disease situations of the population" (TCS)* *"care and attention are optimized" (APP)*
Decrease in cost	4	-	*"cost reduction for HUS" (TCS)* *"cost reduction with transportation" (TCS)*
Time Optimization	2	2	*"offer timely resolution of doubts" (APP)* *"decrease in waiting time" (TCS)*
Access to specialists	2	2	*"offer doubts resolution with trained professionals" (APP)* *"access to specialists, even though it is far" (TCS)*

Categories	Professionals		Examples of reports : tele-educators and students
	TUT	STU	
Improvement of VocationalTraining	3	4	*"extremely useful space for the permanent formation in health" (TUT)* *"constant updating" (STU)*
Time Optimization	2	2	*"flexibility in being able to access content delivered, in available days and times" (TUT)* *"The information is immediate" (STU)*
Decrease in distance	3	0	*"rich experience that decreases the distance between people" (TUT)* *"improve my work" (STU)*
Improvement of clinical practice	1	1	*"strengthening the work process to the health professional" (TUT)* *"facilitates the dialogue between teacher student, because it takes away the doubt at the same moment in which the class is observed" (STU)*
Facilitates the relationship	1	1	*"allows for eye contact, bringing people together and makes them more comfortable with questions, issues and effective participation" (TUT)*
Greater effectiveness of actions	0	1	*"obtain information to solve problems, because it quickly relates to the patient" (TUT)*
Greater convenience	0	1	*"it is more convenient and more comfortable to attend class in my house" (STU)*

Source: field survey.

Table 3 - Categories related to perceived disadvantages of telehealth, according to reports from teleconsulting participants (TCS), professional applicants (APP), tele-educators (TUT) and students (STU).

Categories	Professionals		Examples of reports : teleconsulting and applicants
	TCS	APP	
Lack of infrastructure	5	-	*"Lack of infrastructure (network and computers in remote cities), besides the necessary technological insertion of health professionals " (TCS)* *"More than 60% of Family Health Units do not have access to the Internet, and in many, access is precarious" (TCS)* *"Not always, we have the opportunity to participate in telehealth due to the unit's daily commitments" (APP)*
Lack of support and time for dedication to the program in points	3	2	*"Many Family Health Units do not have a policy of incentive / encouraging the use of these tools (such as determining specific schedules for dedication to the program" (TCS)*
Difficulty of incorporating the program into the work process	3	-	*"Difficulty in incorporating telehealth actions into the work process of the primary health care professional" (TCS)* *"Incorporation as a regular activity of insufficient attention networks to generate population impact" (TCS)*
Damage to the relationship	-	2	*"cost reduction for HUS" (TCS)* *"cost reduction with transportation" (TCS)*
There is no disadvantage	-	3	*"At the moment I have no disadvantages" (APP)*

Categories	Professionals		Examples of reports : teleconsulting and applicants
	TUT	STU	
Lack of infrastructure	4	3	*"need a good internet network and staff with specific training to work with the technological resources" (TUT)* *"when there is a connection failure, speed drop" (STU)*
Time limit	2	-	*"if the student continues with the doubt the tutor will not have much time to expose the whole concept about the student's doubt" (TUT)*
Needs on student's dedicaton	2	-	*"the student needs to be dedicated to follow the actions taken at a distance and not lose important information" (TUT)*
Low valuation	1	-	*"little appreciation for the activities performed" (TUT)*
Damage to the relationship	-	1	*"the interpersonal relationship of the participants, lecturers" (STU)*

Source: field survey.

A discrepancy was found in relation to the relationship between the interlocutors, which was appointed as advantage and as a disadvantage (Tables 2 and 3), identical to the literature. There are authors who believe that there is an impoverishment of the relationship between professionals because they feel their autonomy threatened or inferiorized by requesting the opinion of another profissional[5]. However, there are authors who consider the telehealth a facilitator of the relationship, since the contact is direct and immediate, giving security to those who need guidance[7]. Many of the participants did not demonstrate a difference in face and distance interaction, but there were some contrary manifestations (Table 4). One of them referred to the fact that the informants felt more comfortable because they were not face to face in the interaction at a distance, which can be explained by the psychological distance that may diminish the implications of convivency[5]. On the other hand, some reports indicated that they felt more comfortable in face-to-face interaction, which is understandable considering that the humanization process arose from the need to rescue the human before the technological advancement[9].

Table 4 - Distribution of participants according to the feeling about interaction/communication with the other professional, when providing/receiving consultancy through telehealth

Categories of teleconsultants and applicants sentiment	Professionals	
	TCS	APP
In the same way that when the interaction / communication is in person.	5	4
More comfortable not to be face to face, since the action is at a distance.	1	1
Do not feel comfortable not being face to face in telehealth care.	-	1
Does not feel well received by the other professional for having contact through a machine.	-	-
Feel welcomed by the other professional because you can exchange experiences.	6	3
Feel free to be in interaction / communication with another professional.	4	3
Feel embarrassed that you do not know the other professional..	-	1
Feel difficulties and losses in acting because he does not know the local customs.	-	-
Feel that not knowing the local customs does not negatively interfere with your guidelines.	2	1
Feel satisfied to be able to provide / seek guidance from another professional.	9	6
Feel embarrassed to provide / seek guidance from another professional.	-	1
Feel difficulty because the other does not capture what you want to convey.	1	2
Feel ease by the other capturing what you want to convey.	2	1
Categories of teleconsultants and applicants sentiment	**Professionals**	
	TUT	**STU**
Likewise in both situations (presence and distance).	4	6
More comfortable not being face to face in distance learning.	1	1
You do not feel comfortable not being face-to-face in distance learning.	1	-
More at ease by being face to face in formal teaching.	1	-
Do not feel comfortable being face-to-face in formal teaching.	-	-
Find it difficult to receive the student at a distance by having contact through a screen.	2	-
Feel happy to provide / receive specialty instruction.	4	3
Feel embarrassment at not knowing the student who is at a distance	-	-
Feel free not to know the tutor / student who is at a distance	4	1
Feel difficulty in understanding the comments and questions of the tutor / student at a distance.	1	-
Feel difficulty because you do not know your local reality	2	1
Feel that not knowing the local customs does not interfere with your training actions	1	1

Source: field survey.

Some professionals reported that the fact that they did not know the local customs did not interfere in their action, but others reported that it interfered. Contemplating the analysis of socioeconomic and cultural conditions is part of the humanization process, so that the needs and dissatisfactions of the other[10] are taken into account. Respect for cultural diversity and pluralism, one of the principles of UDBHR, is essential when human rights are respected[3]. In telehealth, as people from different places are in contact, the differences can be even greater and, if not considered, it is possible that there is a false idea that the communication was effective, but may have left unresolved points. Therefore, it is suggested to participants of actions via telehealth that consider and value human diversity, as pointed out by WHO[6]. It is necessary to respect the opinion of each, so that intermediations occur and consensus is reached. Otherwise, the other may give the impression that he will

abide by what was suggested to him, but in fact, as it is not what he believes, acts according to his beliefs and the intervention may not succeed.

Most participants considered that the actions via Telehealth succeeded, since the cases were resolved and there was a satisfactory teaching-learning process (Table 5). Oliveira[4] also found success in the UFPE core services. Although human beings are physically and psychologically different, as well as in their values and principles, it is necessary to consider that all are equal in terms of dignity and rights. Therefore, it is not conceivable that a precarious care is offered at a distance because, even if in remote locations, this population is entitled to the same quality of care as those who live in more advanced centers, given the principle of equality, justice and equity of UDBHR[3].

Table 5 - Distribution of professionals according to the efficacy and success of actions performed at a distance.

Considerations of teleconsultants and the applicants	TCS	APP
All cases have been resolved	-	3
Most have been resolved	9	2
A minority has been resolved	-	1
No cases were resolved	-	-
Can not tell	-	1
Total	**4**	**3**
Considerations of teleconsultants and the applicants	**TCS**	**APP**
A good teaching-learning process	5	7
A regular teaching-learning process	2	-
A precarious teaching-learning process	-	-
Can not tell	-	-
Total	**1**	**2**

Source: field survey.

Some of the participants made complementary comments to the questionnaire and new data emerged. One of them was the difficulty of disseminating the program to provide greater adherence. Oliveira[4] confirmed in his study the difficulty of adherence to the program in the nucleus of Pernambuco. Hjelm[5] also addressed this issue by citing the resistance of professionals in using telehealth. The adherence of professionals is essential for the program to be effective and to achieve the greater goal of access to health for all, regardless of where they are, promoting the principle of non-discrimination and the non-stigmatization ofthe UDBHR[3].

For this to happen, there must be professionals willing to use this instrument in the exercise of their profession, to contribute to this strategy that brings benefits to society, attending to another principle of UDBHR[3]. social responsibility and health. Investments and actions aimed at promoting basic needs bring greater gain to people's health. However, it is necessary to define who is responsible in this process, since the government takes responsibility, but its actions in isolation tend not to succeed. In the case of the Telehealth Brazil Networks Program, it is necessary that health professionals participate actively. It is not enough for the Ministry of Health to launch strategies to encourage the actions of the program, just the local managers are not enough to support the work initiatives in telehealth, if there are no professionals in sufficient numbers to accomplish this work.

Another information was that telehealth provides the exchange between professionals in the same area and interdisciplinarity, which is essential in the field of healthcare. When communication is efficient, it enables the sharing of experiences and the exchange of experiences[10]. In general, telehealth provides the exchange of information between services and with this the sharing of solutions already achieved in more developed centers[11], meeting the principle of UDBHR[3] of sharing benefits. This sharing is accomplished through tele-education, teleassistance and, especially, of the second formative opinion, which provides the empowerment and autonomy of professionals, because, in addition to the guidance, provide them with material to apply in similar future situations. With this, it meets the principle of UDBHR[3] of solidarity and cooperation, understood not

as charity, but as the transformation of people, because it seeks to transform professionals from remote places, offering means to have freedom of action and become competent and qualified[3,12].

This study addresses suggestions made by authors who have also researched the subject and pointed out the need to deepen the analysis on the ethical criteria of telehealth application and the interaction dynamics that are processed[11]. The main ethical issues pointed out in the literature and which deserve prominence are: free and clarified consent, confidentiality, secrecy and security in the transmission of data, the reliability and vulnerability of people living in places underdeveloped[6,11].

Questions regarding free and informed consent, confidentiality, secrecy, security in data transmission and reliability were not cited at any time by the participants. It is possible to assume that, because they did not have direct contact with the patient, they were not valued. However, they cannot be neglected, because they involve the principles of UDBHR[3] of autonomy and individual responsibility, of consent, of individuals without the ability to consent, of privacy and confidentiality and of human dignity and human rights. As teleconsultancy exists according to the patient, these principles have to be considered, after all the patient's data will be passed on and it is his problem that will be on the agenda. When the applicant professional perceives the need to seek help from someone more experienced and with greater knowledge, he needs to inform the patient and request permission to comment on his problem with another professional. If this does not happen, the patient's autonomy will not be respected, or - in the event that it is not competentto to decide - on his/her responsible[3].

It is crucial to adopt measures to avoid the risk of breach of confidentiality in the data transmission[5,6,11]. The information provided to subsidize the study of a case can only be passed on when authorized and only to those who participate in the study.

The question of the vulnerability of people living in poorly developed sites was not directly addressed, but is contained in the goal of telehealth and meets the principle of UDBHR[3] of respect for human vulnerability and individual integrity. Telehealth has enabled the care of patients with access difficulties, training of health professionals and orientation to the population in general[5]. The difficulty of access to the most developed centers weakened people, making them vulnerable[13] by the reduced possibilities of obtaining quality health care. Using telehealth is a way to protect these people, giving them greater possibilities of obtaining quality healthcare. It also protects professionals from distant cities, as they may have access to scientific improvement and updating activities.

Other principles not addressed were protection of future generations and protection of the environment, biosphere and biodiversity. To date, there are no indications of damage to persons or nature caused by the equipment used in telehealth. However, it is necessary to pay attention to technologies that arise and, if applicable, to take protective measures for future generations and teh ecosystem[3].

This study increased the comprehension of the practices developed in telehealth actions in the context of Telehealth Nucleus of the Federal University of Pernambuco. It is suggested to carry out studies on the other nuclei to know their progress, or, studies with participants of all nuclei, which can bring more comprehensive and accurate information about the development of the program in Brazil.

Conclusion

This study analyzed the telehealth based on the Universal Declaration on Bioethics and Human Rights[3]. The choice was made in function of the belief that Bioethics discusses and better reflects the issues related to biological sciences and health in general; UDBHR proved to be quite pertinent for this discussion, since it contributed to the analysis of the interaction between human and technology.

According to the perception of the members of the studied telehealth nucleus, there is a discrepancy regarding the interaction between the professionals and between tutor and student, being considered, sometimes, as an advantage and, sometimes, as a disadvantage. Therefore, telehealth managers are suggested to develop actions to minimize possible conflicts and to ensure the quality of interaction among participants. According to their perception, they are facilitating aspects of the intervention through telehealth the improvement of professional training and clinical practice, the greater effectiveness of actions, the reduction of cost and distance, the optimization of time and the greater convenience.

On the other hand, there are difficulties in the lack of infrastructure, the lack of management support that does not provide time for dedication to the program in the points, damaging the incorporation of the program in the work process, the little appreciation of the activities that can be developed and the student's need for dedication to have an active participation in the teaching-learning process.

Based on the application of the principles of UDBHR[3] in the observed results, it was found that telehealth promotes equality, justice and equity, protects and collaborates so that there is no discrimination or stigmatization of people living in remote locations and, for this, are vulnerable, because there is sharing of solutions already achieved in more developed centers. It was also verified that there is a need to consider between the possible risks and benefits; to consider human diversity; undertake actions that minimize the difficulties and thus ensure greater adherence and greater effectiveness in the activities of the program, stimulating the professionals to be co-responsible with the health and quality of life of society; ask the patient (or his/her guardian) permission to share data about your problem with another professional, respecting your right to choose what you deem best for you;

adopt measures to avoid the risk of breach of confidentiality in the data transmission. The satisfaction of all principles will ensure respect for human dignity and human rights.

It is suggested to the managers of the Telehealth Nucleus of UFPE that allow the reflection on these results among all the participants, as well as the managers of other nuclei and the program that also analyze these results, because they can represent similar situations to those found in your locality. Itis also suggested that interested researchers develop studies involving the other nuclei to provide subsidies to program management, focusing on bioethical contributions that provide reflection on the needs of the other, human dignity and the good of the collectivity, to continue the undertaking of actions that ensure the universalization of health.

References

1. Lima CMAO, Monteiro AMV, Ribeiro EB, Portugal SM, Silva LSX, Junior MJ. Videoconferências: Sistematização e experiência em telemedicina. Radiol. Bras. 2007 Oct;40(5):341-4.

2. Brasil, Ministério da Saúde. Portaria nº 2.546 de 27 de outubro de 2011 [internet]. Redefine e amplia o Programa Telessaúde Brasil, que passa a ser denominado Programa Nacional Telessaúde Brasil Redes (Telessaúde Brasil Redes). 2011 [acesso em 2013 Mar 9]. Disponível em: http://bvsms.saude.gov.br/bvs/saudelegis/gm/2011/prt2546_27_10_2011.html

3. United Nations Educational, Scientific and Cultural Organization (Unesco). Universal Declaration on Bioethics and Human Rights [internet]. 2005 Oct 19 [access in 2013 Mar 21]. Available on: http://portal.unesco.org/en/ev.php-URL_ID=31058&URL_DO=DO_TOPIC&URL_SECTION=201.html

4. Oliveira DG. Análise do grau de implantação da telessaúde na estratégia saúde da família em Pernambuco: estudo de casos [dissertação]. [Internet]. Recife (PE): Centro de Pesquisas Aggeu Magalhães, Fundação Oswaldo Cruz; 2010. 2016 [acesso 2016 Jan 31]. Disponível em: http://www.cpqam.fiocruz.br/bibpdf/2010 oliveira-dg.pdf.

5. Hjelm NM. Benefits and drawbacks of telemedicine. J Telemed Telecare. 2005;11:60–70. DOI: 10.1258/1357633053499886

6. Jack C, Mars M. Telemedicine a need for ethical and legal guidelines in South Africa. SA Fam Pract [internet]. 2008 [access in 2014 Jun 08];50(2). Available on: http://reference.sabinet.co.za/webx/access/electronic_journals/mp_safp/mp_safp_v50_n2_a13.pdf.

7. Wen CL. Telemedicina e Telessaúde valorizam a humanização da relação entre profissionais de saúde, pacientes e familiares. Prof. Dr. Chao Lung Wen Telemedicina e Telessaúde [internet]. [data desconhecida] [acesso em 2014 Jan 29]. Disponível em: http://chaowen.med.br/artigos/telemedicina-e-telessaude-valorizam-a-humanizacao-da-relacao-entre-profissionais-de-saude-pacientes-e-familiares/

8. Guzzo, GB; Souza CSBN. Perspectiva discente sobre a qualidade das aulas a distância no ensino semipresencial. Rev educ escrito - PUCRS.2012 Dez; 3(2):30-41.

9. Silva ID, Silveira MFA. A humanização e a formação do profissional em fisioterapia. Ciênc. saúde coletiva. 2011;16(Suppl 1):1535-46.

10. Schimith MD, Simon BS, Brêtas ACP, Budó MLD. Relações entre profissionais de saúde e usuários durante as práticas em saúde. Trab educ saúde. 2011 Nov;9(3): 479-503.

11. Rezende EJC, Melo MCB, Tavares EC, Santos, AF, Souza C. Ética e telessaúde: reflexões para uma prática segura. Rev Panam Salud Publica [internet] 2010 [acesso em 2011 Out 19];28(1):58-65. Disponível em: http://dx.doi.org/10.1590/S1020-49892010000700009.

12. Garrafa V, Soares SP. O princípio da solidariedade e cooperação na perspectiva bioética. Rev Bioethikos. 2013;7(3):247-58.

13. Almeida CMT, Rodrigues Vitor MCP, Escola Joaquim José Jacinto. The representations of human vulnerability held by health workers - development and validation of a scale. Rev Latino-Am enferm. [Internet]. 2013 [access on 2014 Jun 30];21(spe):29-37. Available in: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0104-11692013000700005&lng=en. DOI: http://dx.doi.org/10.1590/S0104-11692013000700005

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