



Effectiveness Evaluation of a Mental Health Intervention Aimed at Healthcare Networks Personnel during Covid-19 Pandemic: Qualitative Analysis from Gender Perspective

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Abstract

Objective: The objective of this research was to evaluate effectiveness of psychological intervention performed with the use of Information and Communication Technologies (ICTs) for health personnel from first-level care networks in Berazategui, part of the metropolitan area in Buenos Aires, Argentina.

Methods: Qualitative exploratory research and evaluative design. The selection of subjects included health personnel who received the intervention and agreed to participate. Satisfaction surveys were implemented, and records of the intervening team and work meetings were analysed. Gender was considered in the examination of the obtained information.

Results: The initial form of presentation of suffering was structured around the axis of care -anguish/stress/complaint/anger for not feeling cared by authorities, or not be able to give an appropriate care to people. The place in their lives of vocational choices regarding caring for others was important to understand this variety of suffering. Improvements were detected in communication and interaction, self-care and a change to a proactive and creative attitude towards work, reduction of anguish and stress. More willingness to psychological care was found in female non-medical personnel, in whom overload was related to the joint demands of work and home labours. As a protective factor of mental health, presence of solid socio-affective network was key. The use of ICTs resulted advantageous.

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Keywords: Effectiveness evaluation; Mental Health Intervention; Psychological care; Health personnel; First-level care; COVID-19 Pandemic; Gender perspective; ICTs.



Conclusions: The criterion of adequacy/plausibility of results regarding the device was reached. The effectiveness of the intervention was characterized by promoting a repositioning of health personnel with respect to the context, the task and the bonds at work. In women, a greater willingness to speak and a feeling of work overload was noticeable. The use of ICTs improved access to mental health care in a pandemic context and generated the feeling of continuous caring, which reinforced the protective factor of the socio-affective network.

Introduction

Since the beginning of this pandemic, the World Health Organization (WHO) and the United Nations have warned about the importance of implementing mental health interventions and psychosocial support for the general population and, especially, for the team in charge of health care [1]. The WHO anticipated that health personnel could experience additional stress factors due to the characteristics of this pandemic: stigmatization; extra physical effort; states of constant vigilance; compliance with protocols that restrict spontaneity and autonomy; increased demand in the work environment; reduced ability to implement basic self-care; fear of transmitting the virus to the beloved ones, among others [2]. In addition, even in non-catastrophe contexts, health personnel perform tasks that can have consequences for their mental health, which is why it is common to consider their work regime as unhealthy [3].

From the point of view of management in Public Health, both at national and provincial levels, a line of action on mental health regarding health workers has been included in the agenda in Argentina. At a more local level, from the Mental Health Direction of Berazategui- a major city in the Metropolitan Area of Buenos Aires, epicenter of the crisis in our country- an action program was designed especially for health personnel involved in assisting this health crisis in the networks of first level of care, which began to be implemented in the last weeks of March 2020. The novelty that was added, because of the government measure of Preventive and Mandatory Social Isolation (hereinafter PMSI) and then Preventive and Social Distancing, was the use of Information and Communication Technologies (hereinafter ICTs), which led to prioritize telematic care [4], so there were still no studies on the possible benefits or obstacles that these tools may entail in these circumstances.

We consider the research relevant because the evaluation of interventions in Public Health constitutes an essential pillar in the development of health policies. In this field, classical randomized and strictly controlled designs cannot always be carried out (sometimes for ethical criteria, other times for operational reasons). However, a strategy is necessary that, with a certain solvency and rigor, allows to know the results of interventions. This often speeds up the review, design or planning phases of the specific intervention that is being deployed and helps to make decisions to the extent that verified information is available. Finally, it must be mentioned that this study was made with the financing support of the scholarship "Salud Investiga" 2020-2021, Program of the Ministry of Health of the Nation, Argentina.

Brief overview of the area of discussion

Local investigations [5] mainly focused their studies on the third level of care. Those relating to the first level of care, Primary Health Care (hereinafter PHC) networks and mental health

were not frequent. As a precedent in our country, previous mental health strategies have been studied with health personnel during the AH1N1 influenza epidemic. From these, it was concluded that effective communication is a strategic-operative input and one of the main axes of mental health protection [6].

The review of previous research on the psychological effects of a catastrophe/pandemic/epidemic on health personnel is conclusive. In addition to long-term effects, the mental health status of health personnel impacts on the performance of their tasks and the quality of care received by patients. A recent research has pointed to a sharp increase in indicators of acute stress, depression, and post-traumatic stress in the general population [1,7]. Currently, regarding studies of the use of ICTs in different fields of application -education, work, relationships, etc- [8-10], the investigations referring to interventions in mental health with health personnel are minority [11] or correspond to pre-pandemic periods [12,13]. The improvement in accessibility is highlighted as the main advantage and the dilution of the limits between personal life and work life as a disadvantage.

Therefore, this research was based on the following question: What effectiveness did we find in the implementation of psychological care with the use of ICTs in health personnel during the COVID19 pandemic? How could we characterize the aspects that were effective? How gender differences impact in the presentation of suffering and access to treatment?

By effectiveness, we understand the relationship between objectives and results under real conditions [14]. The evaluation of the results essentially consists of verifying whether the established objectives have been achieved. This implies that the purpose has been achieved under the real conditions of the place where it was carried out, assessing the adequacy (existence of observable indicators of change that we can relate to the intervention) and/or plausibility (attribution of the observed results to the program, due to its prompt appearance after its application). In these evaluations, the indicators of change are assessed based on the certainty with which we can relate them to the intervention [14]. We then set out to characterize the initial mental state in the intervened subjects and the post-intervention state; delimit results attributable to the mental health intervention device; distinguish advantages and/or disadvantages in the use of ICTs in the evaluated device and establish facilitating or hindering conditions in the access of these personnel to mental health care, including gender perspective in the analysis.

Methods

Qualitative research, of exploratory nature, with an evaluative design of the effectiveness of an intervention, consisting of the assessment of adequacy and/or plausibility, defined above. The satisfaction surveys of the intervened personnel who consented to participate in this study were analysed; as well as the institutional records of the team involved and the chronicles of the team meetings.

Regarding the analysis of the data, they have been interpreted through abductive [15] and analogical reasoning; content analysis [16]; also, the hermeneutic phenomenological method [17] has been useful.

The scope of the study was made up of a complex care network of the first level of care in the district of Berazategui. The research participants were health personnel from the first level of care with pandemic tasks -frontline workers-, who received

the intervention between March 2020 and September 2021. The evaluated intervention described below was offered directly and personally during the prevention and promotion strategy at the beginning of the pandemic to a total of 126 workers. 68 psychological assistance interventions were carried out, and 45 cases were incorporated into the present study, which completed the satisfaction survey. 78 % of these cases were women, in their majority with non medical health tasks (nursery, administrative, maintenance labours). Only five of the cases were physicians, two of them women.

Analysis of biases

Aware of the fact of the double function at work, as the principal investigator is in charge of the Mental Health Executive Direction of the place, can bias the collection and analysis of data - particularly those coming from the personnel in charge-, an attempt was made to reduce this bias to the minimum possible, making explicit the uncontrolled involvement [18] in periodic supervisions.

Ethical considerations

The research was carried out after a process of informed consent from all its participants and approved by an Ethical Committee.

Description of the implemented intervention

From the first early examination of mental health emergencies detected at the beginning of the pandemic and the measure of PMSI, in order to develop an intervention program, we chose the expression "situation related to COVID" to name the spectrum of demands received.

These demands, in turn, were organized according to the target population of the intervention:

- Health personnel, especially affected by the task involved.
- Continuity of care in mental health users.
- New consultations directly related to COVID (cases of confirmed positive diagnosis, awaiting diagnosis or close contact; mourning for close losses).
- New consultations directly related to COVID (population in PMSI situation and its consequences)
- The community against COVID: interventions related to schools, development societies, neighbourhood clubs, communication strategies with a preventive focus.

Within this broad framework of demands, the first line of intervention became more relevant, that is to say, the need for psychological clinical listening spaces for frontline health personnel in first-level care networks, who presented a series of very notorious initial discomforts: fears of lack of conditions for the task, fear of contagion, resistance to work, anger, complaints, demotivation, anguish, avoidances and inhibitions, as well as the absence of proactive proposals for the reconfiguration of the task.

Given this first diagnosis of the situation, the Mental Health Executive Direction of Berazategui Public Health Secretary designed an action program consisting of two devices that responded to two levels of strategy: one for prevention/promotion of mental health and another for mental health intervention/treatment of front-line health personnel using ITCs, the latter being the intervention evaluated through this research.

The interventions were carried out by clinical psychologists coordinated by this Direction. So the planned action was made up of: a broad strategy of primary prevention focused on the self-care of health personnel, using small conferences in the territory and videoconferences, implemented from the provision of PSMI in mid-March 2020, which in turn served to promote and offer psychological intervention through ICTs. In this way, it was established that addressing to a professional psychologist could help health personnel in this situation. Team meetings were also held with other areas directors from the Public Health Secretary, both to detect problems in the work crew and to obtain personal data with a view to making the first telephone contact with those workers who could not be located in the territory, or those who preferred to be contacted that way.

Regarding the mental health intervention of health personnel, the psychologists team made the proposal to the target population through ITCs: a minimum of two individual clinical interviews with the possibility of expanding to more interviews. In the cases in which the first diagnosis determined the need to continue with the interviews, in addition to one more series of interviews, telematic group spaces were offered to manage critical situations according to the interpretation of the demand. The intervention culminated in the presence of some modification of the initial suffering and subjective positioning, with the option of completing a satisfaction survey in order to evaluate the device and investigate its effects, prior acceptance of informed consent, incorporating as mentioned 45 people into the study. Mental health status checks were performed 3 and 6 months later through ITCs.

It should be noted that the psychologists involved, all dependent from this Direction, were supervised weekly with a team meeting format, based on the principles of institutional psychotherapy [19], to promote listening conditions and availability of our mental health personnel who also was going through the context of a pandemic and it had as well to innovate in attention with ICTs work. This allowed to work on the barriers that could hinder the development of psychological intervention. Such meetings were documented in digital chronicles. This dimension of the device was essential to be able to offer alternatives to merely empathetic listening or the production of catharsis.

Results and discussion

Regarding the mental state at the beginning of the pandemic, in terms of ICD-10, the presentations described as Other anxiety disorders (F41) and Reaction to severe stress, and adjustment disorders (F43) [20] have prevailed. As it was already mentioned, from the clinical interviews carried out and the subsequent follow-up of cases, health personnel presented a series of very notorious initial discomforts, characterized by the acute appearance of anguish and fears regarding working conditions and contagion, resistance to work, anger, complaints against hierarchical personnel or against peers pointed out as possibly irresponsible in care -prior to the implementation of any action in the pandemic-, demotivation, avoidance and inhibition, attitudes of neglect of their own health, as a special form of presentation of mental suffering. This initial form of presentation of suffering was structured around the axis of care -anguish/stress/complaint/anger/fear for not feeling cared by authorities or not being able to give an appropriate care to people. In the course of the intervention, this form of suffering could be related to the place of vocational choices of care/support in their vital weft, which had a therapeutic effect.

The evaluation of the mental health intervention through ICTs, analysed from implementation of satisfaction surveys and the other mentioned sources, showed that it was effective: improvements were detected in communication and interaction, self-care, and a change to a proactive and creative attitude at work. It was also found decreased anxiety and stress. A greater disposition to the intervention was found in non-medical personnel and in women (78%), in which the overload was related to the joint demands from work and home. As a protective factor for mental health, the fact of having a solid socio-affective network was highlighted. The use of ITCs was advantageous for the accessibility and continuity of the clinical intervention.

The effectiveness of the mental health intervention was characterized by influencing a repositioning of health personnel with respect to the context, the task, and work bonds. In women, a greater willingness to speak and a feeling of work overload was notorious. In men, consultations came later and in states where mental health was more affected.

The use of ITCs made access to mental health care possible in a pandemic and generated the sensation of continuous containment due to the very nature of such technologies (possibility of immediacy in the response, plasticity regarding the framing), all this reinforced by the protective factor of the socio-affective network.

We believe that this type of intervention improved accessibility, early consultation and favoured equity access in.

We highlight the contribution that can be done from a gender perspective: most of the health personnel who consulted were self-perceived as women, and were mainly nurses. Both in men and in physicians, consultations were produced later in the course of the pandemic. We have taken note that, at the time called by some "second wave" of the pandemic, consultations of health personnel occurred in a more spontaneous way, since the existence of the device was already known. Demands from hierarchical personnel increased, who, until that moment, had shown themselves to be more stoic in facing the pandemic, as well as male personnel in general.

We consider these results relevant to include the gender perspective in the mental health approaches of health personnel, since roles socially attributed to men and women according to their professions affect the accessibility to mental health consultations in critical situations.

- Regarding other effects of the intervention as well as this research, we must mention that the evaluation of effectiveness of this mental health intervention using ITCs allowed new decisions and actions to be taken that concern not only health personnel but the population in general-Continuity with offering of mental health intervention on health personnel, while their repositioning impacts not only their mental health but also in a better attention for the people who consult.
- Replacement of the classic device for receiving cases with an ITCs device for psychological initial listening, both in the 31 PHC Centers where Psychology is a basic discipline and in the local Mental Health Center: this improved initial access to the consultation for both health personnel and the population in general. Likewise, the use of ITCs for receiving cases where the demand comes from third parties or institutions is implemented more frequently, giving a clearer mapping of the situation which allows

better planning of the intervention.

- Implementation of a telephone follow-up device for cases of severe chronic mental illness, which makes it possible to anticipate possible recurrences and therefore advance strategies.
- Increasing the number of emergency interventions via telephone calls, incorporating intervention with ITCs in the action flowchart. The plasticity of ICTs has allowed intervention at the moment with relatives or with the emergency system to expedite adequate access to the second level of care.
- Pluralization of intervention devices in PHC with ITCs. We highlight the case of adolescents, who are more familiar with the use of ITCs and welcomed workshops and groups proposed in this way.
- Execution of relevant training for health personnel on main issues such as suicide, reaching a larger population with the use of ICTs compared to other years.
- Monitoring territorial practices with ITCs more frequently and reduce unnecessary circulation in the context of a pandemic.

On the other hand, the collection of experiences with the use of ICTs in health and the investigation of their effectiveness are resources for the creation of assistance protocols in unprecedented situations such as the present, responding to ethical standards. In the case of mental health, to share results and develop clear lines of action for moments of serious confusion, as well as to produce training materials for professionals and students of related careers - who can measure the importance of flexible and creative strategies in adverse contexts- allow action formats that can be transferred to other places or circumstances for their adaptation. In relation to the elements of the mental health intervention presented, we have considered the "team meeting" component for our intervening personnel as essential to generate conditions of flexibility necessary for the circumstances. In this sense, it is highlighted that the fundamental contribution of the use of ITCs, linked to their very nature -immediacy of response, flexibility of framing-, has been the reinforcement and promotion of social bonds, since they contribute to the experience of continuous accompaniment, so necessary to face adverse circumstances.

In this same direction, seen and considering the pre-existing prejudices in the disciplines related to our field on the use of technologies for mental health consultation up to the moment of the pandemic in our country, this work shows that the ITCs become a tool of extreme potential for the implementation of strategies aimed at improving access to care and optimizing the response. Therefore, in a broader sense, to incorporate them rationally, for example in mental health first-listening, reception and follow-up devices such as described, may be favourable, particularly in primary health care. It is necessary to consider the current global transformations from the perspective of the rational use of teleconsultation as balance for management in health.

Finally, the inclusion of the gender perspective in Public health makes possible to design devices that take into account possible differences in access and development of consultations, as well as to outline future lines of research related to the suffering of health personnel in light of the review of classical

paradigms of femininities and masculinities, disciplinary traditions and their incidence in the varieties of psychic suffering, as is the case of medicine and nursing, so key in this pandemic.

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