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Special article

Deconstructing myths, building alliances: a networking model to enhance tobacco control in hospital mental health settings

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ABSTRACT

Life expectancy for people with severe mental disorders is up to 25 years less in comparison to the general population, mainly due to diseases caused or worsened by smoking. However, smoking is usually a neglected issue in mental healthcare settings. The aim of this article is to describe a strategy to improve tobacco control in the hospital mental healthcare services of Catalonia (Spain). To bridge this gap, the Catalan Network of Smoke-free Hospitals launched a nationwide bottom-up strategy in Catalonia in 2007. The strategy relied on the creation of a working group of key professionals from various hospitals —the early adopters— based on Rogers' theory of the Diffusion of Innovations. In 2016, the working group is composed of professionals from 17 hospitals (70.8% of all hospitals in the region with mental health inpatient units). Since 2007, tobacco control has improved in different areas such as increasing mental health professionals' awareness of smoking, training professionals on smoking cessation interventions and achieving good compliance with the national smoking ban. The working group has produced and disseminated various materials, including clinical practice and best practice guidelines, implemented smoking cessation programmes and organised seminars and training sessions on smoking cessation measures in patients with mental illnesses. The next challenge is to ensure effective follow-up for smoking cessation after discharge. While some areas of tobacco control within these services still require significant improvement, the aforementioned initiative promotes successful tobacco control in these settings.

Desmontando mitos, construyendo alianzas: un modelo en red para mejorar el control del tabaquismo en el ámbito de la salud mental hospitalaria

Palabras clave:
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RESUMEN

La esperanza de vida para las personas con trastornos mentales graves se reduce hasta 25 años en comparación con la población general, principalmente debido a enfermedades causadas o agravadas por el tabaco. Sin embargo, el tabaco es un tema a menudo descuidado en el ámbito de la salud mental. El objetivo de este artículo es describir una estrategia dirigida a mejorar el control del tabaco en servicios de salud mental hospitalarios de Cataluña (España). Por este motivo, la Red Catalana de Hospitales sin Humo puso en marcha en 2007 un grupo de trabajo de profesionales clave, los *early adopters*, según la teoría de la difusión de las innovaciones de Rogers. En la actualidad, el Grupo de Trabajo, con un enfoque de abajo arriba, está integrado por profesionales de 17 hospitales (el 70,8% de todos los hospitales de la región con unidades de hospitalización de salud mental). Desde 2007, el control del tabaco ha mejorado en diferentes áreas, tales como el aumento de la sensibilización de los profesionales, la formación de profesionales en intervención para dejar de fumar y el cumplimiento de la prohibición de fumar en las

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salas de ingreso. El Grupo ha elaborado y difundido materiales como guías de práctica clínica y de buenas prácticas, ha implementado programas para dejar de fumar, y ha organizado jornadas y sesiones formativas sobre intervención en tabaquismo en personas con trastornos mentales, entre otras actividades. Los siguientes pasos se centrarán en garantizar un seguimiento eficaz de la cesación tabáquica después del alta hospitalaria. Aunque aún queda mucho trabajo en algunas áreas del control del tabaquismo dentro de estos servicios, este enfoque descrito promueve con éxito mejoras en este ámbito.

Introduction

The prevalence of smoking in people with mental disorders is higher than in the general population.[1] However, smoking is viewed as a normal habit in the culture of mental health settings. The aim of this article is to describe a strategy to overcome this neglected situation in Catalonia (Spain).

Smoking in mental health-care settings: denying the problem

Smoking is the biggest avoidable cause of death and disability in developed countries. Although the prevalence of smoking in these countries has declined in recent years, certain populations, such as people with mental illness, are not following this trend.[2] This difference may reflect a failure of public health and clinical services to address the needs of this population.

Smoking prevalence and the number of cigarettes per day rises as the severity of the mental disorder and the number of mental health disorders in life increase.[1] Consequently, the prevalence of smoking is dramatically higher in psychiatric inpatients, with prevalence rates up to 80%,[3] while the prevalence of smoking in the general population of Catalonia is 25.9%. For example, the prevalence in patients with schizophrenia is 60% in outpatients and up to 80% in inpatients, 60% in patients with bipolar disorders and 70-90% in patients with other substance use disorders. Thus, life expectancy for people with severe mental disorders may decrease by up to 25 years[4] mainly due to diseases caused or worsened by smoking.[5] However, smoking has usually been neglected in mental health care settings.

Patients with mental illness are less likely to receive advice to quit smoking than patients without mental illness.[6] Additionally, mental health professionals and systems have been reluctant to implement total smoking bans in mental health-care units. While smoke-free policies in workplaces and public places have been implemented in many countries, mental health wards are usually exempt.

A proposal of change through specific strategies

There is a need to increase the priority of tobacco control in the mental health agenda. Changing priorities and professional motivation requires time and a well-defined strategy.

In Catalonia, a nation located in the north-eastern part of Spain with more than 7.5 million inhabitants, the Catalan Network of Smoke-free Policies ("the Network") was established in 1999 to promote tobacco-control strategies in hospitals[7] (www.xchsf.cat). The Network is supported and funded by the Catalan Government through its Public Health Agency. The Network currently (2015) consists of 75 hospitals, 90% of all hospitals that offer public services in Catalonia.

Tobacco control has been thoroughly improved in Catalan hospitals in recent decades; however, the impact of the Network on mental health settings has been minor or lacking. Thus, the Network designed a specific strategy in November 2007 to target hospital mental health settings including both inpatient and outpatient units. This strategy required low-intensity institutional support; a low economic burden was also necessary in accordance with the Spanish financial crisis.

Strategy development and outcomes

Creating a framework to introduce changes: recruiting early adopters

The Network began a new strategy to enhance tobacco control in hospital mental health settings via a bottom-up approach that works from the grassroots through people working together, resulting in decisions that arise from collaboration. The strategy relied on the creation of a working group of key professionals identified as motivated and experienced in the topic of smoking in patients with mental disorders: the early adopters.

The Network based its strategy on Rogers' theory of the Diffusion of Innovations,[8] which explains the process that occurs when people adopt a new idea, practice, intervention, etc. This theory has been applied broadly in health-care settings.[9] According to this theory, individuals are categorized by the degree to which they adopt a new idea earlier than other members of a social system. The Network sought early adopters of tobacco control in mental health hospitals to serve as opinion leaders; early adopters are the first to adopt new strategies and to diffuse them to the majority through social channels.[8] This approach was intended to help speed the diffusion process and to broaden and strengthen the influence of professionals on their settings by having them act as a group.

Rogers[8] described five qualities that cause some new procedures or strategies to spread more rapidly and successfully than others: perceived benefit of the change, compatibility with existing beliefs and practices, complexity of the proposed change, trialability, and observable results of the adoption of the change by others. In our case, the first steps consisted of contacting key mental health professionals and explaining the purpose of the working group (the Tobacco and Mental Health Group). Over time, more professionals from other hospitals joined the working group. The group held a maximum of three meetings per year and worked mainly over the Internet. Participation in the working group was not economically rewarded, and funding from private companies was never involved.

The working group began in 2007 with 11 professionals from six hospitals who had been directly identified and invited by the Network. Afterwards, the Network contacted the head of the mental health service in every hospital with mental health inpatients units in order to identify potential participants. In 2016, the working group consisted of 29 professionals from 17 hospitals (12 doctors, 11 psychologists, 6 nurses). The working group comprises 70.8% (n = 17) of all Catalan hospitals with acute mental health inpatient units (n = 24). Professionals from the remaining 29.2% of hospitals (n = 7) rejected the offer to participate in the working group after one invitation. We could not identify a common characteristic between the hospitals that rejected the offer, although all of these hospitals had a low-low/medium tobacco control strategies rating in the periodic evaluations of the Catalan Network.

Through consensus, the working group established a variety of objectives described below. Outcomes from the working group are

disseminated by members to their hospitals with the backing of the working group, the Network, and the Catalan Government.

The working group in action: achieving relevant change

First activities: exploring the situation and needs

The working group defined two initial steps. First, a guide to good practice principles was edited.[10] The group translated and adapted a guide from the Irish Health Promoting Hospitals Network[11] for the Catalan context. This document established the major principles for achieving good tobacco control in mental health hospital units. Second, the level of tobacco control in mental health-care services in Catalonia was explored.[12] Based on the principles delineated in the guide, an electronic questionnaire was designed to explore four dimensions: smoking intervention and resources, staff training and commitment, management of smoking areas, and communication of smoke-free policies. The questionnaire was sent to, and completed by, the line manager of each unit. Responses to this questionnaire indicated that the main areas of concern were related to smoking intervention (offering intervention, the availability of smoking-cessation drugs, and follow-up after discharge) and staff training on smoking cessation. As an example, only 41% of the 186 units surveyed (96.6% of all the units in Catalonia) offered smoking cessation treatment to their patients, and only 53% responded that their professionals had knowledge or training in tobacco cessation treatment.

Training professionals on interventions for smoking cessation

Based on the results of the questionnaire, the working group set objectives related to staff training. The complexity of new procedures or interventions affects their rate of diffusion. Thus, adopting new interventions requires the potential adopter to develop new skills and conceptualizations (the complexity of the proposed change, in Roger's theory).[8]

This training goal was achieved via three strategies. First, one-day training sessions in the headquarters of the Network were designed for all professionals working in mental health units in hospitals. The members of the working group acted as peer educators. Second, mental health staff teams were trained in their own hospitals though a "Training the Trainers" program launched by the Network. Some members of the working group were accredited to deliver a standard course in their own hospitals. The program offered personalisable presentation slides, pocket intervention guides, and credits for participants. Third, the working group wrote a comprehensive evidence-based clinical intervention guide for smoking cessation for patients with mental disorders[13] as well as a guide for conducting this intervention throughout inpatient stay and beyond.[14]

Total smoking bans

Until January 2011, Spanish tobacco-control law 28/2005 banned smoking inside hospitals. The new law (Law 42/2010, which came into force in January 2011) extended the ban to outdoor hospital campuses and to short-stay psychiatric units, both indoors and outdoors (these units included acute-patients units, sub-acute and medium-stay patients units, detoxification and dual disorders units). Only in long-stay patients units smoking were still allowed indoors and outdoors. After publishing arguments in favour of smoke-free outdoor spaces[15] the Network advised several members of the Spanish Parliament of the necessity and feasibility of implementing these changes.

In the mental health-care settings of many countries, the debate about implementing total smoking bans has been long and hard; there was previously no scientific evidence about the potential health effects of implementing smoking bans, from the most permissive to the strictest. The Network therefore evaluated the levels of second-hand smoke (SHS) in all adult inpatient units in Catalonia[16] through the measurement of air concentrations of particulate matter <2.5 μm ($PM_{2.5}$). The study included all type of mental health inpatient units (short- medium- and long-stay psychiatric units) and was conducted between November 2010 and March 2011, when Spain was transitioning from implementation of one national smoking regulation to a newer one (Law 42/2010, enforced starting in January 2011). The results of this study showed that only units with total smoking bans had SHS levels below the WHO-recommended levels for long-term exposure (10 $\mu g/m^3$), and units with indoor or outdoor smoking areas had levels of SHS between two and five times the recommended threshold.[16] However, professionals in these units were not aware of the levels of SHS and of the potential harmful health effects.[3] The Network's analysis was sent to the managers of each unit in order to foster a more realistic perception of the SHS levels in their wards. In general, greater perception of the advantages of an innovation leads to quicker adoption (the perceived benefit of change in Rogers' theory).[8]

Implementation of the new Spanish regulation prompted mental health units to design intervention programs for smoking cessation and to have smoking-cessation drugs available. Nicotine-replacement therapy was not usually included in the hospitals' portfolio services for these units; in 2009, only 48% of the acute units in Catalonia had nicotine-replacement therapy available[12] versus 81% in 2013.

Communication of tobacco-control activities

Communication of the activities carried out by the working group is important because the new procedures must be visible to potential adopters. An essential aim of this communication is to raise awareness in the mental health community. New ideas, procedures, and interventions are not rapidly adopted if they are not compatible with the current values, beliefs, and practices of the majority (compatibility with existing beliefs and practices in Rogers' theory).[8]

Our dissemination strategy has been based on a variety of activities, for example: 1) clinical sessions at the hospitals that are conducted by members of the working group in those units and demonstration of the materials produced by the working group; 2) presentation of the results of studies and other activities in national congresses of psychology, psychiatry, nursing, addiction, and public health, on the group's web page, and, more recently, via Twitter; and 3) organization of conferences supported by the Catalan Government. Three one-day conferences have been organized over six years. The aims of the conferences were to challenge prevailing misconceptions, to present guides formulated by the working group, and to show examples of good practices in hospitals, since facilitating the visibility of the results of new procedures leads to higher probabilities of adoption (observable results of the adoption of the change by others in Rogers' theory).[8]

Next steps

The goals achieved during hospitalization were usually lost after the patients were discharged. The Network's efforts have been limited to the hospital setting; the outpatient setting is beyond the scope of the Network. Appropriate follow-up has been demonstrated to be a key factor in maintaining tobacco abstinence after discharge. Thus, the Network and the Catalan Government designed a new program to ensure effective follow-up: all inpatients motivated to maintain their abstinence after discharge are offered intensive cognitive-behavioral therapy with one year follow up and free smoking-cessation drugs during outpatient treatment. This strategy implies high levels of coordination and consistency among settings, as well as brief waiting periods between discharge and the first outpatient visit. The program has

been progressively implemented, initially on a small scale (trialability in Rogers' theory).[8] Acute patients units, Detoxification units and Dual Disorders units participated in the program. Preliminary results on 197 patients from 11 hospitals, all highly motivated to maintain the smoking cessation post-discharge, resulted in 41% abstinence at first month, 24% at three months, 15% at six months and 7% at 12 months after discharge (Ballbè M, Antón L, Fernández E. El Programa PDT-sm. Barcelona: Annual meeting of the Catalan Network of Smoke-free Hospitals. Personal communication, November 23rd; 2015).

In the context of an integrative service model, the challenge of this program is to enhance collaboration and coordination of the hospital with other levels of the National Health Service that provide outpatient treatment.

Conclusions

Improving smoking cessation among patients with mental illness is a priority for enhancing quality of life and reducing morbidity and mortality in these patients. It is also a way to prioritise the rights of a usually marginalized population.

Some areas of tobacco control within the Catalan mental health services still require improvement; however, approaches like those of the Network, together with improvements in Spanish tobacco-control legislation, promote successful tobacco control in these settings.

Editor in charge

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Authorship contributions

M. Ballbè and A. Gual designed the structure of the manuscript, and M. Ballbè drafted the manuscript, which was revised by A. Gual, G. Nieva, E. Saltó, E. Fernández, and the Working Group. All authors helped revise it for relevant intellectual content and approved the final version of the manuscript. All authors designed and implemented the activities described in this manuscript.

Conflicts of interest

None.

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