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Doctors with Mental Health Disorders asking for help to a Physicians' Health Program: voluntary vs. non-voluntary admissions

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DOCTORS WITH MENTAL HEALTH DISORDERS ASKING FOR HELP TO A PHYSICIANS' HEALTH PROGRAM: VOLUNTARY VS. NON-VOLUNTARY ADMISSIONS

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Dr. Braquehais, the main researcher, was involved in all phases of the study, including study design, literature search, conduct of the study, data analysis and final article write up. Dr. Sergi Valero performed the statistical analysis and reviewed the manuscript. Mrs. Viviana Nasillo edited the paper in English. Dr. Bel, Dr. Navarro, Dr. Padrós, Mr. Matalí, Dr. Arteman, Dr. Bruguera and Dr. Casas contributed to the critical review of the paper. All authors approved the final version of the manuscript.

ABSTRACT

Objective: To compare the profile of doctors with Mental Disorders admitted to a Physicians' Health Program depending on their way of access (voluntary vs. non-voluntary).

Design: Retrospective chart review.

Method: We analyzed 1,545 medical records of doctors admitted to the Physicians' Health Program of Barcelona from February 1st 1998 until December 31st 2012.

Results: Most doctors (83.2%) entered the program voluntarily. Doctors with induced-compulsory referrals were older ($\bar{x}$ =55.0 vs. $\bar{x}$ =49.6 years; t=6.96, *p<0.01*). More men (68.3%) than women (45.8%) had non-voluntary admissions (OR= 0.39; 95% CI=0.29-0.52). Self-referrals were more frequent among patients with Non-Addictive Mental Disorders (84.6% vs. 15.4%; OR=4.52; 95% CI= 3.23-28.45).

Patients self-referred needed less inpatient admissions (16.8% vs.30.9%; OR=2.22; 95% CI=1.63–3.01) and the length of their treatment episodes was shorter ($\bar{x}$ =24.3 vs. $\bar{x}$=32.4 months; t=3.34; *p<0.01*). Logistic regression showed a significant model (Chi-square=67.52; df=3; *p<0.001*). Age, gender and diagnosis were statistically associated to type of referral.

Conclusions: Male, older and addictive doctors may have greater difficulties in asking for help to Physicians' Health Programs. These patients also need more clinical resources than those who enter the program voluntarily. Preventive and treatment interventions for this specific population should carefully consider these findings.

STRENGTHS AND LIMITATIONS OF THIS STUDY

- *"This is the first study that compares the profile of doctors treated at a Physicians' Health Program depending on their type of admission (voluntary vs. non-voluntary)"*
- *"This study is based on data from the Physicians' Health Program located in Barcelona (Spain)"*
- *"The results suggest that male, older and addictive doctors may have greater difficulties in asking for help to our Physicians' Health Program. These patients also need more clinical resources than those who enter the program voluntarily"*
- *"The main limitations of this study are the study design (a chart review) and the lack of information about clinical and other psychosocial variables that could be related to the type of admission"*
- *"Non stigmatizing doctors with addictions, promoting help seeking among male physicians, and encouraging early self-identification of Mental Disorders could become effective preventive strategies in this professional group"*

INTRODUCTION

The first specific programs for physicians (Physicians' Health Programs, PHPs) suffering from Mental Health Disorders (i.e. *sick doctors*) were developed in USA since the late 1970s with the main aim of preventing malpractice behaviors, mainly related to drug and alcohol misuse.[1-3] Similar programs were developed later on in Canada,[4] Australia,[5] and the UK[6]. Norway[7] and Switzerland[8] offer basic preventive and counselling services for doctors as well. Some French regions are willing to implement similar programs for their practising physicians. However, most ongoing programs for doctors mainly provide compulsory treatment when malpractice issues have been involved.

In Spain, the PHPs (PAIME, in Spanish) were developed since 1998 and are ruled by the "Colegio de Médicos" of each Spanish region.[9] Spanish "Colegios de Médicos" are institutions where all doctors need to be registered. They act both as Medical Associations and as Regulatory Bodies (or Medical Councils). Every "Colegio de Médicos" in Spain offers to their registered physicians a PHP outpatient service. Nonetheless, there is only one PHP inpatient unit for all of the Spanish PHP programs currently located in Barcelona. The doctor-as-patient's last names are changed once he/she enters the program in order to warrant confidentiality. Their real identity can only be disclosed without their consent if there is a threat to self or others.

The Spanish PHP promotes voluntary treatment as well as enrollment in preventive interventions. Only when malpractice issues are identified, the treatment becomes compulsory. Compulsory actions in all countries applying this program are similar once doctors with high risk or evidence of malpractice are identified from having a Mental Health Disorder. Sick doctors are obliged to undergo a psychiatric treatment and must prove they remain abstinent (if they suffer from an Addictive Disorder) in order to keep their license to practice.

The aim of this study is to compare the profile of doctors with Mental Health Disorders who are admitted to the PHP located in Barcelona (PAIMM, in Catalan) depending on their form of admission (voluntary vs. non-voluntary). Our specific objectives were: a) to compare the differences in age, gender and main diagnosis at admission; b) to compare the mean length of treatment episodes and the number of inpatient admissions during their treatment process; and, c) to discuss the preventive and treatment implications of our findings.

METHODS

Setting

Medical records of physicians referred from the "Colegio de Médicos" of Barcelona to the PHP located in Barcelona were selected. We grouped the types of referrals into two groups: voluntary vs. non-voluntary. We identified voluntary referrals as those of patients self-referred to the program and non-voluntary referrals as those of patients coming after: 1) induced referral (by a colleague or relative); 2) confidential information received by their "Colegio de Médicos"; or, 3) formal complaint to the "Colegio de Médicos" due to malpractice issues being identified.

Participants

A retrospective chart review of clinical and socio-demographic data was conducted on 1,545 medical records of physicians admitted to the Barcelona PHP from February 1st 1998 until December 31st 2012.

Ethics

In Spain, neither approval by an Ethics Committee nor informed consents from patients are needed in order to conduct a chart review. Nevertheless, the principles outlined in the Declaration of Helsinki were followed during this research.

Clinical and socio-demographic variables

The variables age, gender and type of referral (voluntary vs. non-voluntary) were selected. Main diagnosis at admission, according to DSM-IV criteria, was obtained from each medical record. We grouped the main diagnoses into two groups (Substance Used Disorders and non-Substance Use Disorders).

Other clinical variables were related to the time (in months) the patients were treated in the program and the presence of inpatient admissions during their follow-up period.

Statistical analyses

Chi-square tests were used to compare dichotomous variables between groups. Odds ratios with 95% confidence intervals were used to analyze the relationship between binary variables. Student's t-tests were used to compare quantitative variables. All hypothesis tests were two-tailed and conducted with an alpha of 0.05.

A logistic regression analysis was conducted to analyze the type of referral using age, gender, and main diagnosis as independent factors. All analyses were performed using SPSS version 20 (Chicago, IL).

RESULTS

Most doctors (83.2%) entered the program voluntarily. Doctors with non-voluntary referrals were older (mean=55.0; SD=11.68 vs. 49.6; SD=11.97 years; t=6.96, $p<0.01$). More men (68.3%) than women (45.8%) were admitted after induced or compulsory referrals (OR= 0.39; 95% CI= 0.29-0.52). Voluntary admissions were more frequent among patients with non-Substance Use Disorders (84.6%) than among those with addictive disorders (15.4%) and these differences were statistically significant (OR=4.52; 95% CI= 3.23-28.45).

Patients self-referred seldom needed inpatient admissions (16.8%) compared to those with induced-compulsory admission (30.9%) and such differences found were statistically significant (OR=2.22; 95% CI=1.63–3.01). The length of treatment episodes was shorter for those identified as self-referred (mean=24.3; SD=28.42 vs. mean =32.4; SD=32.4 months; t=3.34; $p<0.01$).

Logistic regression analysis showed a significant model (Chi-square=67.52; df=3; *p<0.001*). Age, gender and diagnosis were statistically associated to type of referral (see Table 1).

DISCUSSION

This is the first study that compares the profile of doctors treated at a PHP depending on their form of admission (voluntary vs. non-voluntary). Most PHPs in other countries are mainly devoted to provide compulsory treatment. Hence, the information we have about doctors with Mental Health Disorders only makes refererences to those who have been identified as in trouble because of their Mental Health Disorders, mainly, SUD. [10-11]

We have observed that doctors are more likely to voluntarily ask for help to our PHP when they are women and suffer from a non-Substance Use Disorder. Those self-referred are also younger than those whose way of access is induced-compulsory. These results suggest that doctors with addictive problems tend to delay seeking help, partly because they may fear the legal consequences of their demand.[12] In line with other studies, women physicians are more likely to ask for help when they suffer from mental distress than their male counterparts.[13]

With regards to their follow-up, doctors who came voluntarily, had shorter treatment episodes and needed less inpatient admissions than those with other types of referral. These findings could suggest a better prognosis in those seeking help compared to those forced to enter the program.

The main limitations of this study are: a) it is a retrospective chart review; b) there was only one main diagnosis for each patient and it was not obtained after a semi-structured interview; c) there were no data available on personality traits and/or other psychosocial variables that could be related to the type of referral to the program.

The results of this study may help identify sick doctors with greater difficulties in asking for help to PHP. Non stigmatizing doctors with addictions, enhancing help seeking among male physicians, and encouraging self-identification of Mental Health Disorders since the early stages of their Medicine career could become effective preventive strategies within this professional group.

On the other hand, our follow-up observations need to be taken into account from an organizational perspective, as doctors with mental or emotional distress who are more reluctant to ask for help may need more clinical resources than those who are motivated with their treatment.

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COMPETING INTERESTS

None declared.

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None declared.

DATA SHARING STATEMENT

No additional data available.

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Table 1. Logistic Regression Analysis output of form of admission

Variables	*B*	Wald	Sig.	OR	(CI 95%)
Age	0.025	9.970	<.01	1.025	(1.010 – 1.042)
Gender (M/F)	-0.557	9.385	<.01	0.573	(0.401 – 0.818)
SUD vs. Non-SUD	-1.331	59.031	<0.001	0.264	(0.188- 0.371)
Constant	.298				

Note. Self-referral= 1; control group = 0; SUD=Substance Use Disorders.

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DOCTORS ADMITTED TO A PHYSICIANS' HEALTH PROGRAM: A COMPARISON OF VOLUNTARY VS. NON-VOLUNTARY REFERRALS

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Contributorship statement

Dr. Braquehais, the main researcher, was involved in all phases of the study, including study design, literature search, conduct of the study, data analysis and final article write up. Dr. Sergi Valero performed the statistical analysis and reviewed the manuscript. Mrs. Viviana Nasillo edited the paper in English. Dr. Bel, Dr. Navarro, Dr. Padrós, Mr. Matalí, Dr. Arteman, Dr. Bruguera and Dr. Casas contributed to the critical review of the paper. All authors approved the final version of the manuscript.

ABSTRACT

Objective: To compare the profile of doctors with mental disorders admitted to a Physicians' Health Program (PHP) depending on their type of referral (voluntary vs. non-voluntary).

Design: Retrospective chart review.

Method: We analyzed 1,545 medical records of doctors admitted to the Barcelona PHP (PAIMM) from February 1st 1998 until December 31st 2012.

Results: Most doctors (83.2%) were self-referred to the program. Patients non-voluntarily referred were older ($\bar{x}$ =55.0 vs. $\bar{x}$ =49.6 years; t=6.96, *p<0.01*) than those self-referred and there were more men (68.3%) than women (45.8%) (OR= 0.39; 95% CI=0.29-0.52). Self-referrals were more frequent among patients with non-addictive disorders (84.6% vs. 15.4%; OR=4.52; 95% CI= 3.23-28.45). Self-referred patients needed less inpatient admissions (16.8% vs.30.9%; OR=2.22; 95% CI=1.63–3.01) and the length of their treatment episodes was shorter ($\bar{x}$ =24.3 vs. $\bar{x}$=32.4 months; t=3.34; *p<0.01*). Logistic regression showed a significant model (Chi-square=67.52; df=3; *p<0.001*). Age, gender and diagnosis were statistically associated with type of referral to the program.

Conclusions: Type of referral to a PHP may be influenced not only by sick doctors' personal traits but also by each program's design and how it is perceived by service users. Our findings should be taken into account when designing treatment and preventive interventions for this professional group.

STRENGTHS AND LIMITATIONS OF THIS STUDY

- *"This is the first study comparing the profile of doctors treated at a Physicians' Health Program depending on their type of referral (voluntary vs. non-voluntary). It is based on data from the Barcelona Physicians' Health Program (PHP)"*
- *"The results suggest that doctors who are male, older or suffering from addictions may have greater difficulties when asking for help from our Physicians' Health Program. These patients also require more clinical resources than those who enter the program voluntarily"*
- *"The main limitations of this study include the study design (a chart review) and the lack of information about clinical and other psychosocial variables that could be related to the referral type"*
- *"Type of referral may be influenced by sick doctors' personal traits as well as by the specific nature of PHP programs and how they are presented to users"*

INTRODUCTION

The first specific programs for physicians (Physicians' Health Programs, PHPs) suffering from mental disorders (i.e. *sick doctors*) were developed in USA since the late 1970s with the main aim of preventing malpractice behaviors, mainly related to drug and alcohol misuse.[1-3] Programs with intensive preventive and treatment interventions were developed later on in Canada,[4] Australia,[5] and the UK[6]. Norway[7] and Switzerland[8] mainly offer preventive and counselling services for doctors. Some French regions are currently working to implement similar programs for their practising physicians.

In Spain, PHPs (PAIME, in Spanish) were developed since 1998 and are ruled by the "Colegio de Médicos" of each Spanish region.[9] "Colegios de Médicos" are institutions where all practicing doctors in Spain need to be registered. They act both as Medical Associations and Regulatory Bodies (or Medical Councils). Every "Colegio de Médicos" in Spain offers to their registered physicians a PHP outpatient service. Nonetheless, there is only one PHP inpatient unit for all of the Spanish PHPs, currently located in Barcelona. The doctor-as-patient's last names are changed once he/she enters the program in order to preserve confidentiality. Their real identity can only be disclosed without their consent if there is a threat to self or others.

The Spanish PHP promotes voluntary treatment as well as enrollment for preventive interventions. Treatment becomes obligatory only when risk or evidence of practice difficulties are identified. Mandatory actions can oblige sick doctors to undergo psychiatric treatment; if they suffer from an addictive disorder this includes proving abstinence once treatment has been completed. The final objective of all these interventions is to help sick doctors recover their personal wellbeing and help them go back safely to their professional practice.

The aim of this study is to compare the profile of doctors with mental disorders admitted to the PHP located in Barcelona (PAIMM, in Catalan) depending on their type of referral (voluntary vs. non-voluntary). Our specific objectives were: a) to compare the differences in age, gender and main diagnosis at admission; b) to compare the mean length of their treatment episodes and the number of inpatient admissions during their treatment process; and, c) to discuss the preventive and treatment implications of our findings.

To the best of the authors' knowledge, this is the first study that analyzes the traits and clinical needs of those who have entered a PHP. This could help identify which doctors may present greater difficulties in asking for help and should be taken into account when designing preventive and treatment strategies for them.

METHODS

Setting

Medical records of physicians referred from the "Colegio de Médicos" of Barcelona to the Barcelona PHP were selected. We classified the types of referrals into two groups: voluntary vs. non-voluntary. We distinguished:

1) Voluntary referrals: patients self-referred to the program.

2) Non-voluntary referrals:

2.1) Induced referral by managers, colleagues or relatives.

2.2) Confidential information about practice problems received by their "Colegio de Médicos".

2.3) Formal complaint to the "Colegio de Médicos" due to practice difficulties.

If, after a clinical evaluation, a mental disorder is identified, the sick doctor is offered outpatient or inpatient treatment depending on the severity of each case.

Participants

A retrospective chart review of clinical and socio-demographic data was conducted on 1,545 medical records of physicians admitted to the Barcelona PHP from February 1st 1998 until December 31st 2012.

Ethics

In Spain, neither approval by an Ethics Committee nor informed consents from patients are needed in order to conduct a chart review. Nevertheless, the principles outlined in the Declaration of Helsinki (10) were followed during this research.

Clinical and socio-demographic variables

The variables age, gender and type of referral (voluntary vs. non-voluntary) were selected. Main diagnosis at admission, according to DSM-IV criteria (11), was obtained from each medical record. We grouped the main diagnoses into two groups (substance use disorders and non-substance use disorders).

Other clinical variables were related to the time (in months) the patients were treated in the program and to the presence of inpatient admissions during their follow-up period.

Statistical analyses

Chi-square tests were used to compare dichotomous variables between groups. Odds ratios with 95% confidence intervals were used to analyze the relationship between binary variables. Student's t-tests were used to compare quantitative variables. All hypothesis tests were two-tailed and conducted with an alpha of 0.05.

A logistic regression analysis was conducted to analyze the type of referral using age, gender, and main diagnosis as independent factors. All analyses were performed using SPSS version 20 (Chicago, IL).

RESULTS

Most doctors (83.2%) were self-referred to the program. Doctors with non-voluntary referrals were older ($\bar{x}$=55.0; SD=11.68 years vs. $\bar{x}$=49.6; SD=11.97 years; t=6.96, *p<0.01*). More men (68.3%) than women (45.8%) were admitted after non-voluntary referrals (OR= 0.39; 95% CI= 0.29-0.52). Voluntary admissions were more frequent among patients with non-substance use disorders (84.6%) than in those with addictive disorders (15.4%) being this difference statistically significant (OR=4.52; 95% CI= 3.23-28.45).

Self-referred patients needed inpatient admissions less frequently (16.8%) compared to those with non-voluntary referrals (30.9%); once again such differences were statistically significant (OR=2.22; 95% CI=1.63–3.01). The length of treatment episodes was shorter for those identified as self-referred (mean=24.3; SD=28.42 months vs. mean =32.4; SD=32.4 months; t=3.34; *p<0.01*).

Logistic regression analysis showed a significant model (Chi-square=67.52; df=3; *p<0.001*). Age, gender and diagnosis were statistically associated with the type of referral (see Table 1).

DISCUSSION

This is the first study that compares the profile of doctors treated at a PHP according to their type of referral (voluntary vs. non-voluntary).

Cross-country comparisons between PHPs are difficult. Data about other PHPs in the US [12] and Canada [13] mainly provide information about non-voluntarily referred sick doctors as a result of substance use disorders. In the UK, the Practitioner Health Program [14] treated 554 practitioners and 20 other professionals during the 2008-2011 period, 85% for mental disorders, 28% for substance use disorders, and 17% for physical problems. Regretfully, no information was available regarding the ways of

access to this program. However 29% of patients needed an intervention from the Regulatory Body.[14] In Switzerland [8], during a three-year period, 80 patients were treated at the ReMed program mainly for burn-out and depression (43%) followed by practice and everyday life problems (32%) and only 13% for addictive behaviours. In Norway [7], after analyzing the data of 227 doctors who had come for counselling to a specific program designed for them, 73% were in need of treatment for anxiety and depression. When analyzing the ways of accessing the program, only 45% were self-referred. No information for cases needing mandatory treatment is available from Switzerland and Norway PHPs [7-8].

Despite the differences between PHPs, mandatory actions in different countries have in common that once malpractice problems are identified, sick doctors are obliged to undergo psychiatric treatment and if they suffer from an addictive disorder they have to remain abstinent. Otherwise, their license to practice will temporarily or definitively be suspended [12-14].

In our PHP, we have observed that doctors are more likely to voluntarily ask for help when they are women and suffer from non-substance use disorders. Those self-referred are also younger when comparing to those whose way of access has been non-voluntary. These results suggest that doctors with addiction problems tend to delay seeking help, maybe because they fear the consequences of their demand [15]. In line with other studies, women physicians are more likely to ask for help when they suffer from mental distress than their male counterparts.[16]

However, the specific nature of our PHP should be taken into account when interpreting our results. Patients may feel encouraged to seek help in our program where voluntary referrals are promoted and mandatory actions are only applied to cases at risk or in evidence of practice problems. Therefore, type of referral may be influenced not only by

the sick doctors' problems but also by each PHP's design including how it is presented to service users.

Our group has recently suggested that a non-punitive philosophy for sick doctors may encourage help seeking amongst them. Since it was created in 1998, self-referrals to the Barcelona PHP have grown from 81.3% during the first years to 91.5% in the last period.[17]

In the present study, doctors who came voluntarily had shorter treatment episodes and needed less inpatient admissions than those with other forms of referrals. These findings suggest a better prognosis for those users seeking help voluntarily compared to those forced to enter the program.

The main limitations of this study are: a) it is a retrospective chart review; b) there was only one main diagnosis for each patient not obtained after a semi-structured interview; c) the lack of personal and ecological variables from the users, as no data was available in terms of personality traits and/or other psychosocial aspects possibly related to the type of referral to our program.

Despite its limitations, the results of this study give some clues when attempting to identify sick doctors with greater difficulties in asking for help from our PHP. Destigmatizing doctors with addictions, enhancing help seeking among male physicians, and encouraging self-identification of mental disorders from the early stages of their Medical training could become effective preventive strategies within this professional group.

On the other hand, our follow-up observations need to be taken into account from an organizational perspective, as doctors with mental or emotional distress who are more reluctant to ask for help from our PHP require additional clinical resources than those who are motivated with their treatment.

Results from this study should be interpreted cautiously, especially when trying to generalize our findings to other settings. The specific philosophy of our PHP is one aspect to be considered. However, some features of sick doctors with difficulties in seeking help may be similar to those observed in other PHPs. Therefore, preventive and treatment strategies for sick doctors in all countries may benefit from taking into account these findings.

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We would also like to thank the members of Galatea Foundation and of the *Col·legi de Metges de Barcelona* for their constant support in the development and maintenance of our Physicians' Health Program.

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None declared.

CONTRIBUTORSHIP STATEMENT

Dr. Braquehais, the main researcher, was involved in all phases of the study, including study design, literature search, conduct of the study, data analysis and final article write up. Dr. Sergi Valero performed the statistical analysis and reviewed the manuscript. Mrs. Viviana Nasillo edited the paper in English. Dr. Bel, Dr. Navarro, Dr. Padrós, Mr. Matalí, Dr. Arteman, Dr. Bruguera and Dr. Casas contributed to the critical review of the paper. All authors approved the final version of the manuscript.

COMPETING INTERESTS

None declared.

DATA SHARING STATEMENT

No additional data available.

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Table 1. Logistic Regression Analysis output of form of admission

Variables	*B*	Wald	Sig.	OR	(CI 95%)
Age	0.025	9.970	<.01	1.025	(1.010 – 1.042)
Gender (M/F)	-0.557	9.385	<.01	0.573	(0.401 – 0.818)
SUD vs. Non-SUD	-1.331	59.031	<0.001	0.264	(0.188- 0.371)
Constant	.298				

Note. Self-referral= 1; control group = 0; SUD=Substance Use Disorders.

DOCTORS ADMITTED TO A PHYSICIANS' HEALTH PROGRAM: A COMPARISON OF VOLUNTARY VS. NON-VOLUNTARY REFERRALS

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Physicians' Health Programs; doctors; type of referral; voluntary; non-voluntary

Word count

1,651 words

Contributorship statement

Dr. Braquehais, the main researcher, was involved in all phases of the study, including study design, literature search, conduct of the study, data analysis and final article write up. Dr. Sergi Valero performed the statistical analysis and reviewed the manuscript. Mrs. Viviana Nasillo edited the paper in English. Dr. Bel, Dr. Navarro, Dr. Padrós, Mr. Matalí, Dr. Arteman, Dr. Bruguera and Dr. Casas contributed to the critical review of the paper. All authors approved the final version of the manuscript.

ABSTRACT

Objective: To compare the profile of doctors with mental disorders admitted to a Physicians' Health Program (PHP) depending on their type of referral (voluntary vs. non-voluntary).

Design: Retrospective chart review.

Method: We analyzed 1,545 medical records of doctors admitted to the Barcelona PHP (PAIMM) from February 1st 1998 until December 31st 2012.

Results: Most doctors (83.2%) were self-referred to the program. Patients non-voluntarily referred were older ($\bar{x}$ =55.0 vs. $\bar{x}$ =49.6 years; t=6.96, *p<0.01*) than those self-referred and there were more men (68.3%) than women (45.8%) (OR= 0.39; 95% CI=0.29-0.52). Self-referrals were more frequent among patients with non-addictive disorders (84.6% vs. 15.4%; OR=4.52; 95% CI= 3.23-28.45). Self-referred patients needed less inpatient admissions (16.8% vs.30.9%; OR=2.22; 95% CI=1.63–3.01) and the length of their treatment episodes was shorter ($\bar{x}$ =24.3 vs. $\bar{x}$=32.4 months; t=3.34; *p<0.01*). Logistic regression showed a significant model (Chi-square=67.52; df=3; *p<0.001*). Age, gender and diagnosis were statistically associated with type of referral to the program.

Conclusions: Type of referral to a PHP may be influenced not only by sick doctors' personal traits but also by each program's design and how it is perceived by service users. Our findings should be taken into account when designing treatment and preventive interventions for this professional group.

STRENGTHS AND LIMITATIONS OF THIS STUDY

- *"This is the first study comparing the profile of doctors treated at a Physicians' Health Program depending on their type of referral (voluntary vs. non-voluntary). It is based on data from the Barcelona Physicians' Health Program (PHP)"*
- *"The results suggest that doctors who are male, older or suffering from addictions may have greater difficulties when asking for help from our Physicians' Health Program. These patients also require more clinical resources than those who enter the program voluntarily"*
- *"The main limitations of this study include the study design (a chart review) and the lack of information about clinical and other psychosocial variables that could be related to the referral type"*
- *"Type of referral may be influenced by sick doctors' personal traits as well as by the specific nature of PHP programs and how they are presented to users"*

INTRODUCTION

The first specific programs for physicians (Physicians' Health Programs, PHPs) suffering from mental disorders (i.e. *sick doctors*) were developed in USA since the late 1970s with the main aim of preventing malpractice behaviors, mainly related to drug and alcohol misuse.[1-3] Programs with intensive preventive and treatment interventions were developed later on in Canada,[4] Australia,[5] and the UK[6]. Norway[7] and Switzerland[8] mainly offer preventive and counselling services for doctors. Some French regions are currently working to implement similar programs for their practising physicians.

In Spain, PHPs (PAIME, in Spanish) were developed since 1998 and are ruled by the "Colegio de Médicos" of each Spanish region.[9] "Colegios de Médicos" are institutions where all practicing doctors in Spain need to be registered. They act both as Medical Associations and Regulatory Bodies (or Medical Councils). Every "Colegio de Médicos" in Spain offers to their registered physicians a PHP outpatient service. Nonetheless, there is only one PHP inpatient unit for all of the Spanish PHPs, currently located in Barcelona. The doctor-as-patient's last names are changed once he/she enters the program in order to preserve confidentiality. Their real identity can only be disclosed without their consent if there is a threat to self or others.

The Spanish PHP promotes voluntary treatment as well as enrollment for preventive interventions. Treatment becomes obligatory only when risk or evidence of practice difficulties are identified. Mandatory actions can oblige sick doctors to undergo psychiatric treatment; if they suffer from an addictive disorder this includes proving abstinence once treatment has been completed. The final objective of all these interventions is to help sick doctors recover their personal wellbeing and help them go back safely to their professional practice.

The aim of this study is to compare the profile of doctors with mental disorders admitted to the PHP located in Barcelona (PAIMM, in Catalan) depending on their type of referral (voluntary vs. non-voluntary). Our specific objectives were: a) to compare the differences in age, gender and main diagnosis at admission; b) to compare the mean length of their treatment episodes and the number of inpatient admissions during their treatment process; and, c) to discuss the preventive and treatment implications of our findings.

To the best of the authors' knowledge, this is the first study that analyzes the traits and clinical needs of those who have entered a PHP. This could help identify which doctors may present greater difficulties in asking for help and should be taken into account when designing preventive and treatment strategies for them.

METHODS

Setting

Medical records of physicians referred from the "Colegio de Médicos" of Barcelona to the Barcelona PHP were selected. We classified the types of referrals into two groups: voluntary vs. non-voluntary. We distinguished:

1) Voluntary referrals: patients self-referred to the program.

2) Non-voluntary referrals:

2.1) Induced referral by managers, colleagues or relatives.

2.2) Confidential information about practice problems received by their "Colegio de Médicos".

2.3) Formal complaint to the "Colegio de Médicos" due to practice difficulties.

If, after a clinical evaluation, a mental disorder is identified, the sick doctor is offered outpatient or inpatient treatment depending on the severity of each case.

Participants

A retrospective chart review of clinical and socio-demographic data was conducted on 1,545 medical records of physicians admitted to the Barcelona PHP from February 1st 1998 until December 31st 2012.

Ethics

In Spain, neither approval by an Ethics Committee nor informed consents from patients are needed in order to conduct a chart review. Nevertheless, the principles outlined in the Declaration of Helsinki (10) were followed during this research.

Clinical and socio-demographic variables

The variables age, gender and type of referral (voluntary vs. non-voluntary) were selected. Main diagnosis at admission, according to DSM-IV criteria (11), was obtained from each medical record. We grouped the main diagnoses into two groups (substance use disorders and non-substance use disorders).

Other clinical variables were related to the time (in months) the patients were treated in the program and to the presence of inpatient admissions during their follow-up period.

Statistical analyses

Chi-square tests were used to compare dichotomous variables between groups. Odds ratios with 95% confidence intervals were used to analyze the relationship between binary variables. Student's t-tests were used to compare quantitative variables. All hypothesis tests were two-tailed and conducted with an alpha of 0.05.

A logistic regression analysis was conducted to analyze the type of referral using age, gender, and main diagnosis as independent factors. All analyses were performed using SPSS version 20 (Chicago, IL).

RESULTS

Most doctors (83.2%) were self-referred to the program. Doctors with non-voluntary referrals were older ($\bar{x}$=55.0; SD=11.68 years vs. $\bar{x}$=49.6; SD=11.97 years; t=6.96, *p<0.01*). More men (68.3%) than women (45.8%) were admitted after non-voluntary referrals (OR= 0.39; 95% CI= 0.29-0.52). Voluntary admissions were more frequent among patients with non-substance use disorders (84.6%) than in those with addictive disorders (15.4%) being this difference statistically significant (OR=4.52; 95% CI= 3.23-28.45).

Self-referred patients needed inpatient admissions less frequently (16.8%) compared to those with non-voluntary referrals (30.9%); once again such differences were statistically significant (OR=2.22; 95% CI=1.63–3.01). The length of treatment episodes was shorter for those identified as self-referred (mean=24.3; SD=28.42 months vs. mean =32.4; SD=32.4 months; t=3.34; *p<0.01*).

Logistic regression analysis showed a significant model (Chi-square=67.52; df=3; *p<0.001*). Age, gender and diagnosis were statistically associated with the type of referral (see Table 1).

DISCUSSION

This is the first study that compares the profile of doctors treated at a PHP according to their type of referral (voluntary vs. non-voluntary).

Cross-country comparisons between PHPs are difficult. Data about other PHPs in the US [12] and Canada [13] mainly provide information about non-voluntarily referred sick doctors as a result of substance use disorders. In the UK, the Practitioner Health Program [14] treated 554 practitioners and 20 other professionals during the 2008-2011 period, 85% for mental disorders, 28% for substance use disorders, and 17% for physical problems. Regretfully, no information was available regarding the ways of

access to this program. However 29% of patients needed an intervention from the Regulatory Body.[14] In Switzerland [8], during a three-year period, 80 patients were treated at the ReMed program mainly for burn-out and depression (43%) followed by practice and everyday life problems (32%) and only 13% for addictive behaviours. In Norway [7], after analyzing the data of 227 doctors who had come for counselling to a specific program designed for them, 73% were in need of treatment for anxiety and depression. When analyzing the ways of accessing the program, only 45% were self-referred. No information for cases needing mandatory treatment is available from Switzerland and Norway PHPs [7-8].

Despite the differences between PHPs, mandatory actions in different countries have in common that once malpractice problems are identified, sick doctors are obliged to undergo psychiatric treatment and if they suffer from an addictive disorder they have to remain abstinent. Otherwise, their license to practice will temporarily or definitively be suspended [12-14].

In our PHP, we have observed that doctors are more likely to voluntarily ask for help when they are women and suffer from non-substance use disorders. Those self-referred are also younger when comparing to those whose way of access has been non-voluntary. These results suggest that doctors with addiction problems tend to delay seeking help, maybe because they fear the consequences of their demand [15]. In line with other studies, women physicians are more likely to ask for help when they suffer from mental distress than their male counterparts.[16]

However, the specific nature of our PHP should be taken into account when interpreting our results. Patients may feel encouraged to seek help in our program where voluntary referrals are promoted and mandatory actions are only applied to cases at risk or in evidence of practice problems. Therefore, type of referral may be influenced not only by

the sick doctors' problems but also by each PHP's design including how it is presented to service users.

Our group has recently suggested that a non-punitive philosophy for sick doctors may encourage help seeking amongst them. Since it was created in 1998, self-referrals to the Barcelona PHP have grown from 81.3% during the first years to 91.5% in the last period.[17]

In the present study, doctors who came voluntarily had shorter treatment episodes and needed less inpatient admissions than those with other forms of referrals. These findings suggest a better prognosis for those users seeking help voluntarily compared to those forced to enter the program.

The main limitations of this study are: a) it is a retrospective chart review; b) there was only one main diagnosis for each patient not obtained after a semi-structured interview; c) the lack of personal and ecological variables from the users, as no data was available in terms of personality traits and/or other psychosocial aspects possibly related to the type of referral to our program.

Despite its limitations, the results of this study give some clues when attempting to identify sick doctors with greater difficulties in asking for help from our PHP. Destigmatizing doctors with addictions, enhancing help seeking among male physicians, and encouraging self-identification of mental disorders from the early stages of their Medical training could become effective preventive strategies within this professional group.

On the other hand, our follow-up observations need to be taken into account from an organizational perspective, as doctors with mental or emotional distress who are more reluctant to ask for help from our PHP require additional clinical resources than those who are motivated with their treatment.

Results from this study should be interpreted cautiously, especially when trying to generalize our findings to other settings. The specific philosophy of our PHP is one aspect to be considered. However, some features of sick doctors with difficulties in seeking help may be similar to those observed in other PHPs. Therefore, preventive and treatment strategies for sick doctors in all countries may benefit from taking into account these findings.

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Table 1. Logistic Regression Analysis output of form of admission

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Note. Self-referral= 1; control group = 0; SUD=Substance Use Disorders.

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Keywords

Physicians' Health Programs; doctors; type of referral; self-referral

Word count

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ABSTRACT

Objective: To compare the profile of doctors with mental disorders admitted to a Physicians' Health Program (PHP) depending on their type of referral.

Design: Retrospective chart review.

Method: We analyzed 1,545 medical records of doctors admitted to the Barcelona PHP (PAIMM) from February 1st 1998 until December 31st 2012.

Results: Most doctors (83.2%) were self-referred to the program. Patients non-self-referred were older ($\bar{x}$ =55.0 vs. $\bar{x}$ =49.6 years; t=6.96, *p<0.01*) than those self-referred and there were more men (68.3%) than women (45.8%) (OR= 0.39; 95% CI=0.29-0.52). Self-referrals were more frequent among patients with non-addictive disorders (84.6% vs. 15.4%; OR=4.52; 95% CI= 3.23-28.45). Self-referred patients needed less inpatient admissions (16.8% vs.30.9%; OR=2.22; 95% CI=1.63–3.01) and the length of their treatment episodes was shorter ($\bar{x}$ =24.3 vs. $\bar{x}$=32.4 months; t=3.34; *p<0.01*). Logistic regression showed a significant model (Chi-square=67.52; df=3; *p<0.001*). Age, gender and diagnosis were statistically associated with type of referral to the program.

Conclusions: Type of referral to a PHP may be influenced not only by sick doctors' personal traits but also by each program's design and how it is perceived by service users. Our findings should be taken into account when designing treatment and preventive interventions for this professional group.

STRENGTHS AND LIMITATIONS OF THIS STUDY

- *"This is the first study comparing the profile of doctors treated at a Physicians' Health Program depending on their type of referral. It is based on data from the Barcelona Physicians' Health Program (PHP)"*
- *"The results suggest that doctors who are male, older or suffering from addictions may have greater difficulties when asking for help from our Physicians' Health Program. These patients also require more clinical resources than those who enter the program voluntarily"*
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INTRODUCTION

The first specific programs for physicians (Physicians' Health Programs, PHPs) suffering from mental disorders (i.e. *sick doctors*) were developed in USA since the late 1970s with the main aim of preventing malpractice behaviors, mainly related to drug and alcohol misuse.[1-3] Programs with intensive preventive and treatment interventions were developed later on in Canada,[4] Australia,[5] and the UK[6]. Norway[7] and Switzerland[8] mainly offer preventive and counselling services for doctors. Some French regions are currently working to implement similar programs for their practising physicians.

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The Spanish PHP promotes voluntary treatment as well as enrollment for preventive interventions. Treatment becomes obligatory only when risk or evidence of practice difficulties are identified. Mandatory actions can oblige sick doctors to undergo psychiatric treatment; if they suffer from an addictive disorder this includes proving abstinence once treatment has been completed. The final objective of all these interventions is to help sick doctors recover their personal wellbeing and help them go back safely to their professional practice.

The aim of this study is to compare the profile of doctors with mental disorders admitted to the PHP located in Barcelona (PAIMM, in Catalan) depending on their type of referral (self-referrals vs. directed referrals). Our specific objectives were: a) to compare the differences in age, gender and main diagnosis at admission; b) to compare the mean length of their treatment episodes and the number of inpatient admissions during their treatment process; and, c) to discuss the preventive and treatment implications of our findings.

To the best of the authors' knowledge, this is the first study that analyzes the traits and clinical needs of those who have entered a PHP. This could help identify which doctors may present greater difficulties in asking for help and should be taken into account when designing preventive and treatment strategies for them.

METHODS

Setting

Medical records of physicians referred from the "Colegio de Médicos" of Barcelona to the Barcelona PHP were selected. We classified the types of referrals into two groups: self-referrals vs. directed referrals. We distinguished:

1) Self-referrals: patients self-referred to the program.

2) Directed referrals:

2.1) Induced referral: although the patients call the program to ask for help, referrals are encouraged or induced by managers, colleagues or relatives.

2.2) Referral after a confidential information received by their "Colegio de Médicos" about practice problems.

2.3) Referral after a formal complaint received by the "Colegio de Médicos" due to practice difficulties.

If, after a clinical evaluation, a mental disorder is identified, the sick doctor is offered outpatient or inpatient treatment depending on the severity of each case.

Participants

A retrospective chart review of clinical and socio-demographic data was conducted on 1,545 medical records of physicians admitted to the Barcelona PHP from February 1st 1998 until December 31st 2012.

Ethics

In Spain, neither approval by an Ethics Committee nor informed consents from patients are needed in order to conduct a chart review. Nevertheless, the principles outlined in the Declaration of Helsinki (10) were followed during this research.

Clinical and socio-demographic variables

The variables age, gender and type of referral were selected. Main diagnosis at admission, according to DSM-IV criteria (11), was obtained from each medical record. We grouped the main diagnoses into two groups (substance use disorders and non-substance use disorders).

Other clinical variables were related to the time (in months) the patients were treated in the program and to the presence of inpatient admissions during their follow-up period.

Statistical analyses

Chi-square tests were used to compare dichotomous variables between groups. Odds ratios with 95% confidence intervals were used to analyze the relationship between binary variables. Student's t-tests were used to compare quantitative variables. All hypothesis tests were two-tailed and conducted with an alpha of 0.05.

A logistic regression analysis was conducted to analyze the type of referral using age, gender, and main diagnosis as independent factors. All analyses were performed using SPSS version 20 (Chicago, IL).

RESULTS

Most doctors (83.2%) were self-referred to the program. Doctors with other types of referrals were older ($\bar{x}$=55.0; SD=11.68 years vs. $\bar{x}$=49.6; SD=11.97 years; t=6.96, *p<0.01*). More men (68.3%) than women (45.8%) were not self-referred (OR= 0.39; 95% CI= 0.29-0.52). Self-referrals were more frequent among patients with non-substance use disorders (84.6%) than in those with addictive disorders (15.4%) being this difference statistically significant (OR=4.52; 95% CI= 3.23-28.45).

Self-referred patients needed inpatient admissions less frequently (16.8%) compared to those with non-voluntary referrals (30.9%); once again such differences were statistically significant (OR=2.22; 95% CI=1.63–3.01). The length of treatment episodes was shorter for those identified as self-referred (mean=24.3; SD=28.42 months vs. mean =32.4; SD=32.4 months; t=3.34; *p<0.01*).

Logistic regression analysis showed a significant model (Chi-square=67.52; df=3; *p<0.001*). Age, gender and diagnosis were statistically associated with the type of referral (see Table 1).

DISCUSSION

This is the first study that compares the profile of doctors treated at a PHP according to their type of referral.

Cross-country comparisons between PHPs are difficult. Data about other PHPs in the US [12] and Canada [13] mainly provide information about non-voluntarily referred sick doctors as a result of substance use disorders. In the UK, the Practitioner Health

Program [14] treated 554 practitioners and 20 other professionals during the 2008-2011 period, 85% for mental disorders, 28% for substance use disorders, and 17% for physical problems. Regretfully, no information was available regarding the ways of access to this program. However 29% of patients needed an intervention from the Regulatory Body.[14] In Switzerland [8], during a three-year period, 80 patients were treated at the ReMed program mainly for burn-out and depression (43%) followed by practice and everyday life problems (32%) and only 13% for addictive behaviours. In Norway [7], after analyzing the data of 227 doctors who had come for counselling to a specific program designed for them, 73% were in need of treatment for anxiety and depression. When analyzing the ways of accessing the program, only 45% were self-referred. No information for cases needing mandatory treatment is available from Switzerland and Norway PHPs [7-8].

Despite the differences between PHPs, mandatory actions in different countries have in common that once practice problems are identified, sick doctors are obliged to undergo psychiatric treatment and if they suffer from an addictive disorder they have to remain abstinent. Otherwise, their license to practice will temporarily or definitively be suspended [12-14].

In our PHP, we have observed that doctors are more likely to be self-referred when they are women and suffer from non-substance use disorders. Those self-referred are also younger when comparing to those whose way of access has been non-voluntary. These results suggest that doctors with addiction problems tend to delay seeking help, maybe because they fear the consequences of their demand [15]. In line with other studies, women physicians are more likely to ask for help when they suffer from mental distress than their male counterparts.[16]

However, the specific nature of our PHP should be taken into account when interpreting our results. Patients may feel encouraged to seek help in our program where voluntary referrals are promoted and mandatory actions are only applied to cases at risk or in evidence of practice problems. Therefore, type of referral may be influenced not only by the sick doctors' problems but also by each PHP's design including how it is presented to service users.

Our group has recently suggested that a non-punitive philosophy for sick doctors may encourage help seeking amongst them. Since it was created in 1998, self-referrals to the Barcelona PHP have grown from 81.3% during the first years to 91.5% in the last period.[17]

In the present study, doctors who came voluntarily had shorter treatment episodes and needed less inpatient admissions than those with other forms of referrals. These findings suggest a better prognosis for those users seeking help voluntarily compared to those forced to enter the program.

The main limitations of this study are: a) it is a retrospective chart review; b) there was only one main diagnosis for each patient not obtained after a structured interview, such as the Structured Clinical Interview for DSM Disorders (SCID-I) [18] c) the lack of personal and ecological variables from the users, as no data was available in terms of personality traits and/or other psychosocial aspects possibly related to the type of referral to our program.

Despite its limitations, the results of this study give some clues when attempting to identify sick doctors with greater difficulties in asking for help from our PHP. Destigmatizing doctors with addictions, enhancing help seeking among male physicians, and encouraging self-identification of mental disorders from the early stages

of their Medical training could become effective preventive strategies within this professional group.

On the other hand, our follow-up observations need to be taken into account from an organizational perspective, as doctors with mental or emotional distress who are more reluctant to ask for help from our PHP require additional clinical resources than those who are motivated with their treatment.

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CONTRIUTORSHIP

Dr. Braquehais, the main researcher, was involved in all phases of the study, including study design, literature search, conduct of the study, data analysis and final article write up. Dr. Sergi Valero performed the statistical analysis and reviewed the manuscript. Mrs. Viviana Nasillo edited the paper in English. Dr. Bel, Dr. Navarro, Dr. Padrós, Mr. Matalí, Dr. Arteman, Dr. Bruguera and Dr. Casas contributed to the critical review of the paper. All authors approved the final version of the manuscript.

COMPETING INTERESTS

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No additional data available.

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Table 1. Logistic regression analysis output of type of referral

Variables	*B*	Wald	Sig.	OR	(CI 95%)
Age	0.025	9.970	<.01	1.025	(1.010 – 1.042)
Gender (M/F)	-0.557	9.385	<.01	0.573	(0.401 – 0.818)
SUD vs. Non-SUD	-1.331	59.031	<0.001	0.264	(0.188- 0.371)
Constant	.298				

Note. Self-referral= 1; control group = 0; SUD=Substance Use Disorders.

DOCTORS ADMITTED TO A PHYSICIANS' HEALTH PROGRAM: A COMPARISON OF SELF-REFERRALS VS. DIRECTED REFERRALS

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Keywords

Physicians' Health Programs; doctors; type of referral; self-referral

Word count

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Contributorship statement

Dr. Braquehais, the main researcher, was involved in all phases of the study, including study design, literature search, conduct of the study, data analysis and final article write up. Dr. Sergi Valero performed the statistical analysis and reviewed the manuscript. Mrs. Viviana Nasillo edited the paper in English. Dr. Bel, Dr. Navarro, Dr. Padrós, Mr. Matalí, Dr. Arteman, Dr. Bruguera and Dr. Casas contributed to the critical review of the paper. All authors approved the final version of the manuscript.

ABSTRACT

Objective: To compare the profile of doctors with mental disorders admitted to a Physicians' Health Program (PHP) depending on their type of referral.

Design: Retrospective chart review.

Method: We analyzed 1,545 medical records of doctors admitted to the Barcelona PHP (PAIMM) from February 1st 1998 until December 31st 2012.

Results: Most doctors (83.2%) were self-referred to the program. Patients non-self-referred were older ($\bar{x}$ =55.0 vs. $\bar{x}$ =49.6 years; t=6.96, *p<0.01*) than those self-referred and there were more men (68.3%) than women (45.8%) (OR= 0.39; 95% CI=0.29-0.52). Self-referrals were more frequent among patients with non-addictive disorders (84.6% vs. 15.4%; OR=4.52; 95% CI= 3.23-28.45). Self-referred patients needed less inpatient admissions (16.8% vs.30.9%; OR=2.22; 95% CI=1.63–3.01) and the length of their treatment episodes was shorter ($\bar{x}$ =24.3 vs. $\bar{x}$=32.4 months; t=3.34; *p<0.01*). Logistic regression showed a significant model (Chi-square=67.52; df=3; *p<0.001*). Age, gender and diagnosis were statistically associated with type of referral to the program.

Conclusions: Type of referral to a PHP may be influenced not only by sick doctors' personal traits but also by each program's design and how it is perceived by service users. Our findings should be taken into account when designing treatment and preventive interventions for this professional group.

STRENGTHS AND LIMITATIONS OF THIS STUDY

- *"This is the first study comparing the profile of doctors treated at a Physicians' Health Program depending on their type of referral. It is based on data from the Barcelona Physicians' Health Program (PHP)"*
- *"The results suggest that doctors who are male, older or suffering from addictions may have greater difficulties when asking for help from our Physicians' Health Program. These patients also require more clinical resources than those who enter the program voluntarily"*
- *"The main limitations of this study include the study design (a chart review) and the lack of information about clinical and other psychosocial variables that could be related to the referral type"*
- *"Type of referral may be influenced by sick doctors' personal traits as well as by the specific nature of PHP programs and how they are presented to users"*

INTRODUCTION

The first specific programs for physicians (Physicians' Health Programs, PHPs) suffering from mental disorders (i.e. *sick doctors*) were developed in USA since the late 1970s with the main aim of preventing malpractice behaviors, mainly related to drug and alcohol misuse.[1-3] Programs with intensive preventive and treatment interventions were developed later on in Canada,[4] Australia,[5] and the UK[6]. Norway[7] and Switzerland[8] mainly offer preventive and counselling services for doctors. Some French regions are currently working to implement similar programs for their practising physicians.

In Spain, PHPs (PAIME, in Spanish) were developed since 1998 and are ruled by the "Colegio de Médicos" of each Spanish region.[9] "Colegios de Médicos" are institutions where all practicing doctors in Spain need to be registered. They act both as Medical Associations and Regulatory Bodies (or Medical Councils). Every "Colegio de Médicos" in Spain offers to their registered physicians a PHP outpatient service. Nonetheless, there is only one PHP inpatient unit for all of the Spanish PHPs, currently located in Barcelona. The doctor-as-patient's last names are changed once he/she enters the program in order to preserve confidentiality. Their real identity can only be disclosed without their consent if there is a threat to self or others.

The Spanish PHP promotes voluntary treatment as well as enrollment for preventive interventions. Treatment becomes obligatory only when risk or evidence of practice difficulties are identified. Mandatory actions can oblige sick doctors to undergo psychiatric treatment; if they suffer from an addictive disorder this includes proving abstinence once treatment has been completed. The final objective of all these interventions is to help sick doctors recover their personal wellbeing and help them go back safely to their professional practice.

The aim of this study is to compare the profile of doctors with mental disorders admitted to the PHP located in Barcelona (PAIMM, in Catalan) depending on their type of referral (self-referrals vs. directed referrals). Our specific objectives were: a) to compare the differences in age, gender and main diagnosis at admission; b) to compare the mean length of their treatment episodes and the number of inpatient admissions during their treatment process; and, c) to discuss the preventive and treatment implications of our findings.

To the best of the authors' knowledge, this is the first study that analyzes the traits and clinical needs of those who have entered a PHP. This could help identify which doctors may present greater difficulties in asking for help and should be taken into account when designing preventive and treatment strategies for them.

METHODS

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Medical records of physicians referred from the "Colegio de Médicos" of Barcelona to the Barcelona PHP were selected. We classified the types of referrals into two groups: self-referrals vs. directed referrals. We distinguished:

1) Self-referrals: patients self-referred to the program.

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Other clinical variables were related to the time (in months) the patients were treated in the program and to the presence of inpatient admissions during their follow-up period.

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DISCUSSION

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Cross-country comparisons between PHPs are difficult. Data about other PHPs in the US [12] and Canada [13] mainly provide information about non-voluntarily referred sick doctors as a result of substance use disorders. In the UK, the Practitioner Health

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