

Communication patterns in the doctor–patient relationship: evaluating determinants associated with low paternalism in Mexico.

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Abstract

Background: Paternalism/overprotection limits communication between healthcare professionals and patients and does not promote shared therapeutic decision-making. In the global north, communication patterns have been regulated to promote autonomy, whereas in the global south, they reflect the physician's personal choices. The goal of this work was contribute to knowledge of the communication patterns used in clinical practice in Mexico and to identify the determinants that favour a doctor-patient relationship characterized by low paternalism/autonomism.

Methods: A self-report study of communication patterns within a sample of 761 mental healthcare professionals in Central and Western Mexico was conducted. Multiple ordinal logistic regression models were performed to analyse paternalism and associated factors.

Results: A high prevalence (68.7% [95% CI 60.0-70.5]) of paternalism was observed among mental healthcare professionals in Mexico. The main determinants of low paternalism/autonomism were medical specialty (OR 1.67 [95% CI 1.16-2.40]) and gender, with female physicians more likely to explicitly share diagnoses and therapeutic strategies with patients and their families (OR 1.57 [95% CI 1.11-2.22]). A pattern of highly explicit communication was strongly associated with low paternalism/autonomism (OR 12.13 [95% CI 7.71-19.05]). Finally, a modifying effect of age strata on the association between communication pattern or specialty and low paternalism/autonomism was observed.

Conclusions: Among mental healthcare professionals in Mexico, an elevated paternalism prevailed. Gender, specialty, and a pattern of open communication were closely associated with low paternalism/autonomism. Strengthening the competencies of health professionals and promoting explicit communication could contribute to the transition towards more autonomist communication in clinical practice in Mexico. The ethical implications will need to be resolved in the near future.

Background

In the doctor-patient relationship, the principle of respect for autonomy [1] implies that patients receive information from their doctors about their diagnosis, treatment and prognosis in an adequate and appropriate way that allows them to make informed decisions and that, in dialogue with their doctors, patients can choose their own degree of participation in this process [2]. In this regard, there is evidence of clinical cases in which, under certain cultural, social or religious circumstances, communicating all the available information could have harmful effects on patients [3]. Some patients prefer not to receive detailed information about their clinical condition, while others feel comfortable with only being informed of their diagnosis and some aspects of their prognosis. [4]. The conflict between the right of patients to receive all available information from their doctors and cultural factors (traditions, beliefs, values, norms, symbols and meanings shared by members of a community to varying degrees [5]) that could oppose such disclosure represents a challenge for professionals when communicating with their patients [6]. Although the need to tell the truth is unquestionable, scenarios in which patients are unwilling to allow

their doctors to give them more information about their health status could lead doctors to adopt a paternalistic attitude (this implies that the doctor makes decisions based on what he or she perceives as the best for the patient, even for those patients who could make the decisions for themselves [7]).

Three ethical perspectives have been described regarding the interaction of physicians with their patients: the paternalistic, the autonomist and the reciprocal. According to the Encyclopedia of Bioethics [8], paternalism is used in the ethical literature to refer “to practices that restrict the freedom of individuals, without their consent, where the justification of such actions is the prevention of any harm they would do to themselves or the production of some benefit for them that they would not otherwise obtain” [9]. Paternalism proposes that the doctor directs the care of his patient, who plays a passive role; in contrast, in the autonomist perspective, communication that leads to an informed patient is promoted [10]. The paternalistic attitude assumes that doctors always know what is best for their patients [11], while from the perspective of reciprocity, the medical staff collaborates with their patients, the patients’ relatives and others to give them a significant opportunity to participate in health care [12].

While respect for the autonomy of a patient is commonly observed in doctor-patient interactions in the United States, in many cultures and particularly in Latin America, there is a group of doctors and families who believe in paternalism as a form of beneficence [6]. Under the assumption of providing protection, physicians can voluntarily withhold information about the diagnosis and prognosis, which may interfere with and even disregard the patient’s preferences [13]. Luna [14] considers that among illiterate populations in Latin America, certain characteristics (a lack of education, knowledge and understanding and thus the inability to make decisions) make communication impossible and that therefore, physicians should decide what kind of treatment the patient should receive; the same attitude has been observed regarding patients from socially marginalized groups [15]. There are trends that establish the benefits of a high degree of paternalism for Latino populations that traditionally do not participate in clinical decisions, including the assumption that healthcare professionals can provide medical services of high ethical quality and establish a great degree of intimacy with the family [16]. There are also positions that recognize that in the case of some clinical conditions, such as neuropsychiatric disorders, patient autonomy may be compromised [17]. In such situations, families’ and patients’ rights in terms of their autonomy should be regarded more strongly than the autonomy of the physician and the laws that regulate the doctor-patient relationship [18-20].

Physicians’ sociodemographic, personal and professional characteristics have an influence on physician-patient interactions. According to some studies, paternalism increases with physician age [21, 22]. Gender differences also have been observed in physicians’ attitudes and communication styles, with female physicians engaging in more dialog [23], adopting a more partnership-building style [24] and tending to be more autonomist [21] than male colleagues. Likewise, other factors, such as religion and physician specialty, may be a source of differences in doctor-patient communication. Morita et al. found that physicians’ attitudes towards patient autonomy were significantly correlated with the physician’s specialty and with physicians having no religion but following a specific philosophy [25].

At the end of the day, the main goals of communication between physicians and their patients are to establish a good interpersonal relationship to facilitate the exchange of information and involve patients in decision-making [26]. In this context, we show the results of a survey on perceptions of the communication patterns used by a selection of mental healthcare professionals in Central and Western Mexico. We used a questionnaire that included professional and personal reflections, case studies and clinical vignettes and questions related to educational level and specialty. The goal of this work was to contribute to the knowledge regarding communication patterns used in clinical practice in Mexico and to identify the determinants that favour a low paternalistic/autonomist doctor-patient relationship.

Materials And Methods

Participants

We conducted a survey of a convenience selection of 761 mental healthcare professionals assisting children with intellectual development disorder (IDD), autism spectrum disorder (ASD), and attention deficit hyperactivity disorder (ADHD), in order to explore their personal and professional characteristics in relation to their patterns of communication with the children's parents. We invited psychiatrists, psychologists, nurses, social workers, and residents in psychiatry and related-healthcare areas to participate. The healthcare professionals worked in mental, neurological and children's hospitals in Mexico City (Psychiatric Hospital Fray Bernardino, National Institute of Neurology and Neurosurgery, National Institute of Psychiatry Ramón de la Fuente Muñiz, Children's Psychiatric Hospital Dr. Juan N. Navarro). In addition, we included residents from the Medical School of the National Autonomous University of Mexico, paediatricians from the Children's Hospital (central state of Morelos), and psychiatrists from the psychiatric healthcare services of Mexico City and the Jalisco Institute of Mental Health. At each institution, an in-person interviewer invited mental healthcare professionals to participate. The interviewer explained the objective of the study and the fact that participation was voluntary and the information provided would be confidential. Subsequently, informed consent was obtained from those who agreed to participate, and they were given the questionnaire, which was collected in the following two hours or the next day. The study was carried out from June 2018 to January 2019.

Questionnaire

"Patrones de comunicación de profesionales de la salud con padres de sujetos con: Trastorno del desarrollo intelectual (TDI), Trastorno del espectro autista (TEA), y Trastorno del déficit de atención-hiperactividad (TDAH)" ("Communication patterns of health professionals with parents of subjects with: Intellectual development disorder (IDD), Autism spectrum disorder (ASD), and Attention-hyperactivity disorder (ADHD)"), an instrument in Spanish, was used [27]. The instrument contains 64 items and is composed of two sections: a) professional and personal reflections and b) case studies or clinical vignettes. The personal reflections section corresponds to questions that explore situations the professionals encounter in both medical care and their daily lives; the responses were used to determine

attributes such as paternalism, the value that professionals place on truth, their attitudes towards death, and their communication patterns. The clinical vignettes section presents case studies and includes questions regarding diagnosis, prognosis and treatment, which were used to construct indicators of the mental health professionals' knowledge about IDD, ASD, and ADHD. In addition, the questionnaire included variables related to educational level and specialty, as well as religion and bioethics training. The questions were answered using a Likert-type response, which allowed an understanding of the mental healthcare professionals' level of agreement with the proposed statements (strongly disagree, disagree, agree, and strongly agree). The questionnaire is an adapted version of an original instrument previously used in other studies of Mexican populations [28, 29] and has shown adequate internal consistency (0.76) through the Kuder-Richardson test [30]. When the questionnaire was developed, an expert panel evaluated the relevance and clarity of the selected items after three rounds of review.

Primary outcome

Paternalism was defined as an attitude and behaviour in which mental healthcare professionals impose their outlooks and decisions on their patients, limiting patient autonomy with the belief that they do so for the benefit of their patients or themselves. Paternalism (dependent variable) was constructed based on the following questions:

- (a) The reaction that I want to inspire in my patients diagnosed with a chronic disease is 1- Confidence and calmness, 2- A combative spirit, 3- Active participation, 4- I do not intervene in the moods of my patients.
- (b) The best hope we can give to a parent with a child diagnosed with IDD/ASD is to make him/her feel that life can continue as normally as possible.
- (c) Emotional distress does very little; therefore, I try to assist the children's parents as much as possible by avoiding feelings such as sadness, grief or anguish.
- (d) Enthusiasm should be shared to encourage parents, even if it means telling a lie.
- (e) We create the reality of others. For example, if a parent with a son diagnosed with an incurable disease sees me being calm, the parent will think, "If the physician is calm, the situation might not be so bad".
- (f) When I see someone looking crestfallen, my first reaction is to try to distract that person to encourage him/her, even if it requires changing the subject.
- (g) Talking about painful topics only makes the pain worse.
- (h) When I have a problem, I try to conceal it from my loved ones.

(i) I was always taught to avoid causing someone distress.

First, the answers to each of the questions were addressed; those indicating that the professionals were in favour of low paternalism/autonomism were considered correct. Subsequently, a score was assigned; for example, if the professional fully agreed with one of the questions that indicated low paternalism, 4 points were assigned in accordance with the Likert scale score (strongly agree, 4 points; agree, 3 points; disagree, 2 points; strongly disagree, 1 point.) We determined the arithmetic sum of the scores for each item, and based on their distribution (tertiles), determined the following categories of paternalism: high paternalism/overprotection (T1, reference category), moderate paternalism (T2) and low paternalism/autonomism (T3).

Independent variables

The possible predictors of paternalism analysed were: *a)* communication pattern, which was defined as the behavior reported by mental health professional in relation to its communication style with parents when discussing the diagnosis, prognosis and/or treatment of patients with IDD, ASD and ADHD. To construct this indicator, 11 questions from the instrument were selected based on input from experts (items 1, 2, 6, 8, 9, 10, 11, 18, 33, 34, 40); *b)* Value assigned to the truth, which refers to the value the healthcare professional indicated placing on conveying the truth in his/her communication with parents; in other words, the correspondence between what the healthcare professional knows about the situation and what the healthcare professional tells the parents (items 18, 19, 28, 31); *c)* Attitude towards death, which refers to healthcare professional's willingness to adapt, react and act in situations related to death (items 28, 29, 30, 41, 43, 44, 47, 49); *d)* Family member with IDD or ASD, which asks whether any member of the professional's family has been diagnosed with IDD or ASD (item 13); *e)* Bioethics courses, which refers to courses related to medical ethics that the healthcare professional has taken throughout his/her professional training (item 16); and *f)* Religion, which refers to whether the professional describes him/herself as a believer or nonbeliever regarding religion (item 53). To construct the communication pattern, value assigned to the truth and attitude towards death indicators, we followed the same methodology that was used for the paternalism indicator.

This study also included indicators related to knowledge about IDD, ASD, and ADHD as predictors of the paternalism. To construct these indicators, three clinical vignettes were presented in the last section of the questionnaire. The clinical vignettes were presented as cases or scenarios featuring people of a specific age with IDD, ASD or ADHD and were accompanied by different questions about diagnosis, prognosis and treatment [27]. Answers were considered correct if they were among those selected by the group of experts in paediatric psychiatry. For IDD and ADHD, 3 or 4 correct answers indicated a positive attitude and a high degree of knowledge, 2 correct answers indicated intermediate knowledge, and 1 or no correct answer indicated a low level of knowledge. For ASD, 3 correct answers indicated a positive

attitude and a high level of knowledge, 2 correct answers indicated an intermediate level of knowledge, and 1 or 0 correct answer indicated a low level of knowledge. The inclusion of knowledge variables is important because they relate to the formulation of an accurate diagnosis of the mental illness being studied. Having an accurate diagnosis increases the health professionals' confidence in communicating and discussing the disorder with either the patient or his or her parents [31-34].

Statistical analysis

A descriptive analysis of the study population was carried out. For comparisons, we used chi-square tests. To evaluate the association between the communication attributes and low paternalism/autonomism, a logistic ordinal multivariate model was constructed. Odds ratios (ORs) and 95% confidence intervals (CIs) were obtained. The following variables were considered possible predictors of low paternalism/autonomism: a) age (tertiles: 43-76 years as the reference category, 30-42 years, 19-29 years); b) gender (male, female); c) specialty (no, yes), d) value assigned to the truth (low, moderate, high); e) communication pattern (withholding, partial communication, open communication- understood as the communication style for which the professional obtained the highest scores, regarding to provide the most information to parents when discussing the diagnosis, prognosis and/or treatment of patients with IDD, ASD and ADHD); f) religion (nonbeliever, believer); g) attitude towards death (low acceptance, moderate acceptance, high acceptance); h) family member diagnosed with some type of IDD/ASD (yes, no); i) bioethics courses (none, ≥ 1), and j) knowledge about IDD, ASD and ADHD (low knowledge, intermediate knowledge, and positive attitude and high knowledge). To assess the joint effects of age and communication patterns or specialty on the likelihood of presenting low paternalism/autonomism, we created the following interaction terms: a) age (tertiles) and communication patterns (withholding, partial communication and open communication); b) age (tertiles) and specialty (yes, no). The reference category for each interaction was withholding and young age and specialty and young age, respectively. Ordinal regression models were also adjusted by gender, familiar with some IDD/ASD, religion, value assigned to the truth, participant institution (medical facility/university), knowledge about IDD, ASD, and ADHD, and bioethics courses. The differences were considered statistically significant when $p < 0.05$. The Stata 14 software was used for all statistical analyses.

Results

Paternalism prevailed among mental healthcare professionals in Mexico. A total of 68.7% (95% CI 60.1-70.5) of the evaluated population presented a considerable degree of paternalism (moderate and high). Furthermore, 66.5% (95% CI 63.0-69.8) of the mental healthcare professionals indicated that they hid some information from their patients. Consistent with this finding, the reported value assigned to the truth was low, at 50.3% of the participants (95% CI 46.7-53.9), as seen in Table 1. Similarly, among mental healthcare professionals in Central and Western Mexico, there was low knowledge regarding IDD (41.7%

[95% CI 38.1-45.3]) and ADHD (38.9% [95% CI 35.4-42.5]). Table 1 shows the frequency of communication attributes by strata of paternalism.

Regarding the predictors of low paternalism/autonomism, women were more likely to explicitly share diagnoses and therapeutic strategies with patients and their families (OR 1.57 [95% CI 1.11-2.22]) (Table 2). Similarly, another determinant of sharing-based autonomy (low paternalism) was having a specialty background (OR 1.67 [95% CI 1.16-2.40]). A pattern of open communication was strongly associated with low paternalism/autonomism (OR 12.13 [95% CI 7.71-19.05]). Among those with intermediate knowledge of ASD, the odds of low paternalism/autonomism were 0.60 (95% CI 0.40-0.91) compared with those with low knowledge about this disorder. Table 3 shows the association of communication attributes and specialty with low paternalism/autonomism in Mexico by age strata.

Discussion

In the present study, out of 761 mental health professionals, 29.3% showed a low paternalistic/autonomist attitude, while the rate of high paternalism/overprotection was 47.8%. Our results are consistent with the paternalistic model proposed by Charles et al. [9, 35], in which patients rely on physicians to make treatment decisions rather than using a more collaborative process, as well as with other research studies [12, 36-39]. In contrast, a study carried out in the United States indicated that most patients prefer to receive as much information as possible about their health status to make informed decisions [22]. In this study of 1,050 physicians, 75% of them preferred a model based on shared decision-making (understood as "an approach in which physicians and patients share the best available evidence when faced with the task of making decisions, and where patients receive support, while considering their options, to achieve informed preferences" [40]), and 14% preferred a paternalistic communication model [22]. However, other studies mention that up to 20% of patients prefer to avoid knowing details of their clinical condition [41], and up to 17% prefer to leave decisions to their relatives or their doctors [42, 43]. A survey showed that 96% of people prefer to listen to the options provided by their doctors and want their opinions to be heard, but up to 50% of them would prefer to leave the final decision to their doctors [44].

In recent decades, the doctor-patient relationship has moved from a model based on paternalism to one that advocates respect for patient autonomy; however, this transition has not been uniform throughout the world. Countries have different cultural, historical and political determinants that can influence the speed and manner in which this transition occurs [45]. In addition, some professionals have doubts about the implementation of an autonomist model based on sharing decisions, indicating that their patients do not want to participate in decision-making, do not have the capacity to participate or could even make bad decisions, and considering that consultations take time that they do not have [46]. Others claim that "they are already doing it", although data from patient experience surveys indicate that this is not generally the case [47]. In Mexico, studies indicate that physicians who are involved in long-term care said they made treatment decisions instead of leaving decisions to patients [29], and it has even been documented that patients prefer to play a passive role during consultations [48]. Therefore, it is clear that

the first step for those who advocate the adoption of a more participatory, more autonomous model is to ensure that physicians have developed the necessary skills for implementing this model and evaluate the impact on patient's health.

Considering the dynamics of the doctor-patient relationship, it is important to take into account that some patients modify their style of communication with their doctors depending on the severity of their disease and prefer to leave decisions to health professionals [49]; additionally, patients' communication style depends on certain sociodemographic factors (age, gender) and their region (country) [43, 50-52]. In Mexico, consistent with findings for other countries [43, 51], patients have reported that they prefer to leave therapeutic decisions to their physicians [29]. Despite the discrepancy between what patients want to hear and what their doctors want to communicate, patients report that they need to feel that their doctors care about them and listen to them [53-55] and that they are interested in participating in decisions because it makes them feel valued as humans [54, 56]; even in scenarios involving about palliative care, patients prefer a style of communication in which respect for autonomy prevails [57]. In this sense, in our study of mental healthcare professionals, we observed that open communication was associated with low paternalism/autonomism. Several studies and measures have been developed to evaluate physician communication patterns. In this regard, the literature has documented that adequate communication allows direct discussion of health problems, for example, to communicate the diagnosis and treatment plans, and thus helps to establish positive and healthy relationships between doctors and patients [58-61].

A determining factor for communication process is the value that the doctor places on truth, which is a human quality that develops throughout life. In our study, we did not find that the value assigned to the truth was statistically associated with low paternalism/autonomism. In this context, respect for autonomy requires that patients be adequately and appropriately informed about their diagnosis, treatment options and prognosis. While there are extreme precedents that suggest that the value of life and survival nullifies the value of truth [3], this clearly is not a general principle in medical practice. In an conservative environment with deeply rooted cultural values, paternalism is accentuated, and the possibilities of autonomy and patient empowerment [62] are not considerations. Despite the discomfort and uncertainty that communicating a diagnosis or a poor prognosis can evoke, physicians should have to tell the truth.

In this study, women had a more autonomist attitude/lower paternalism than men. Gender differences in practice and communication style have been well documented in the literature [24, 63, 64]. In line with the practice of a more autonomist style, a study that assessed psychiatrists' sharing-based decision behaviours reported higher scores for women [65]. Likewise, in more recent studies, female physicians [23, 66] and medical students [66, 67] had significantly more patient-centred attitudes (understood as share of power, control, and information; respect for patients' feelings, expectations, and preferences taking these factors into account in medical decision-making [68]), suggesting that gender-stereotyped communication is established through the attitudes of medical students and seems to persist among practicing physicians [66]. These differences are even more important in that they lead to corresponding

differences in patients' behaviour towards physicians. Results from a meta-analysis on effects of physician gender on patient communication suggested that physicians' behaviour is largely mirrored back in the behaviour shown to them by patients [69]. Previous research on physician-patient communication has revealed that female physicians conduct longer consultations [64] and engage in more partnership behaviours and discussions about psychosocial aspects, and they communicate a higher degree of empathy [23, 64, 70]. Such patient-centred care may result in better health outcomes [71]; however, due to the increasing burden of mental disorders and its recent inclusion in the United Nations Sustainable Development Goals [72], reducing these gender differences is essential to cover the demand for attention for these diseases.

We also found that having a specialty was associated with low physician paternalism/autonomism; however, other studies have shown that even when doctors specialize, the paternalistic attitude persists and differs by specialty. In a study of 104 German physicians, Falkum and Førde found that psychiatrists had significantly lower paternalism scores than physicians with somatic specialties and specialists in social medicine, possibly because an understanding of both the cognitive and emotional aspects of the doctor-patient relationship is considered crucial to the practice of psychiatry [21]. Results from a cross-sectional survey of U.S. physicians indicated that professionals with a medical specialty were more likely to prefer paternalism than professionals in primary care (including family practice, general practice, internal medicine and paediatrics), while surgeons were the least likely to prefer it [22]. A more recent study conducted in Japan, Taiwan, and Korea to evaluate physicians' attitudes toward patient autonomy showed that compared with physicians in internal medicine, those specializing in surgery were significantly more likely to agree with the statement that the patient should be told the truth, even if the family disagrees [25]. A qualitative study conducted to analyse the perspectives of U.S. paediatricians regarding shared decision-making in ADHD indicated that instead of familiarizing families with all the options first, the paediatricians provided information to persuade families to accept the treatment of their choice [73]. These different scenarios can be explained in part by the quality of communication between the physician and the patient/parent, the technical language used and possibly the cultural context of both parties [74] as well as the development of medical bioethics and doctor-patient communication skills [75].

Professionals' limited knowledge about mental health and stigmatizing attitudes toward mental illness can delay the diagnosis of autism [76] and other disorders, such as IDD (so-called intellectual disability), which can result in inequitable access to health care services [77] that may be due to a poor communication process. In our study, the percentage of mental healthcare professionals with a positive attitude toward and high knowledge about ASD and ADHD was 29.4% and 22.7% respectively, while that for IDD was lower (15.5%); this result could be explained by the fact that IDD is not clearly perceived as a pathological condition and, to an even greater degree, it is not considered a public health problem in Mexico. In the global north, insufficient training in the management of IDD has been reported [78, 79]. A study conducted with a sample of nurses working at an emergency department indicated that although the majority reported having interacted with a patient with suspected intellectual disability in the last year, only 28% of those surveyed mentioned having the knowledge to determine that a patient may have an

intellectual disability, and only half reported feeling able to adopt an adequate communication [80]. There are few studies evaluating the level of ASD knowledge among physicians screening children in the general population [81]. In a study implemented to evaluate the knowledge of ASD among 93 Dutch physicians who screened children for psychiatric symptoms, the results showed a general ASD knowledge score of 7.1 (SD 1.2) on a 1-10 scale but a specific ASD knowledge score of only 5.7 (SD 1.7) [76]. Regarding ADHD, the results of a cross-sectional study of 340 primary health physicians in Saudi Arabia that aimed to collect data on personal characteristics, knowledge, attitude, and diagnosis and management practices regarding this disorder showed that approximately one-third of the physicians had a poor level of knowledge [82]. Similar to our study, some works have used a questionnaire based on clinical vignettes with multiple-choice response options, while other studies have used a range of different assessment approaches (e.g., checklists, short answers, interviews, true/false or Likert-scale response options) [81]; however, there is little consensus regarding the most precise method. Due to the use of different instruments to evaluate the level of knowledge, it could be difficult to analyse whether and how the level of mental illness knowledge among Mexican psychiatrists and neurologists compares to that of healthcare professionals in other countries. An adequate level of knowledge that allows early detection and initiation of treatment is an important factor for optimizing development and improving the lifelong outcomes of people with autism [83, 84] and other neurodevelopmental disorders.

Finally, in our study, we found that the association of communication patterns and specialty with paternalism was modified by age of the health professionals, and this effect was greatest among professionals aged 30 to 42 years. A study of Israeli doctors reported that the younger doctors communicated better than the older ones [85]. A multi-country study found that doctors under 40 years of age have a more proactive attitude toward discussing an unfavourable prognosis [86]. According to Honeycutt et al., paediatricians and younger doctors are more likely to prefer a participatory style with parents of ADHD children [87]; may be due in part to, medical school programs in U.S. have made efforts to include a humanistic approach and seminars about doctor-patient communication [87].

Limitations

Due to the nature of the design, we reported associations and did not consider causal relationships. Furthermore, this study used a convenience sample, which can compromise the generalization of the results. Although the results do not represent all health professionals, they may represent the first situational description of the determinants of paternalism in terms of communication patterns between health professionals and parents of patients with neurodevelopmental disorders or other diseases.

Conclusions And Recommendations

A considerable pattern of paternalism/overprotection prevailed among mental healthcare professionals in Mexico. Gender, specialty, and a pattern of open communication were closely associated with low paternalism/autonomism. Discussions regarding the communication patterns that doctors use with their

patients in Mexico aim to establish, without judgment, the importance of creating a more effective relationship between physicians and their patients by a) strengthening the practice of patient-centred medicine, b) ensuring that professionals develop the highest level of medical competencies, including ethical values and physician-patient communication skills, while considering physicians' personal and professional characteristics, and c) promoting autonomy in the physician-patient relationship as we strive for a society in which self-determination is not considered a privilege but a human right, that is, a society characterized by social justice. It is also necessary for health professionals to develop strategies that facilitate shared decision-making; such strategies include providing clear and simple explanations, verifying understanding, listening to patients' concerns and needs, reaching a consensus with patients regarding the treatment plan and establishing a follow-up plan that is convenient for both parties [88]. More research is needed to provide evidence regarding which mode of care is more beneficial and fitting in each context, particularly in the relationship with parents of patients with certain neurodevelopmental disorders.

Abbreviations

OR(s): Odds ratio(s); CI(s): Confidence interval(s); IDD: Intellectual development disorder; ASD: Autism spectrum disorder; ADHD: Attention deficit hyperactivity disorder

Declarations

Ethics approval and consent to participate

The protocol was approved by the Research Ethics Committee of the National Institute of Public Health in Mexico and the other participating institutions. At each participating institution, an interviewer verbally invited mental healthcare professionals to participate. Once the healthcare professionals agreed to participate, we provided a questionnaire for them to fill out, which was collected in the following two hours or the next day. E-consent was voluntary and was obtained prior to the interview.

Consent for publication

Not applicable.

Availability of data and materials

The datasets used and/or analysed during the current study are available from the corresponding author on reasonable request.

Competing interests

The authors declare that they have no competing interests.

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Author' contributions

ALA, LPE and KG designed the study. ALA, DER, AGCI and MLE performed the data collection and data analysis. ALA, RVR interpreted the data. ALA, LPE and RVR drafted the manuscript, and ALA, DER, SCL and RVR made major revisions. All authors read and approved the final manuscript.

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Tables

Table 1. Sociodemographic characteristics and communication attributes of health professionals stratified by paternalism, Mexico, 2018.

Variables	Overall	High paternalism /Overprotection		Moderate Paternalism		Low paternalism /Autonomism		p Value ²
	n = 761	n = 364 (47.8%)		n = 159 (20.9%)		n = 223 (29.3%)		
	n (%) ¹	n	% ¹	n	% ¹	n	% ¹	
Age								
43-76 years	229 (30.1)	117	32.1	38	23.9	68	30.5	
30-42 years	234 (30.8)	103	28.3	53	33.3	75	33.6	
19-29 years	280 (36.8)	134	36.8	65	40.9	77	34.5	0.27
Gender								
Male	310 (40.7)	168	46.2	64	40.3	74	33.2	
Female	440 (57.8)	192	52.8	91	57.2	147	65.9	0.007
Specialty								
No	328 (43.1)	191	52.5	56	35.2	76	34.1	
Yes	425 (55.9)	172	47.3	97	61.0	146	65.5	<0.001
Familiar with some IDD/ASD								
Yes	132 (17.4)	65	17.9	27	17.0	40	17.9	
No	630 (81.1)	296	81.3	129	81.1	179	80.3	0.97
Communication pattern								
Withholding	315 (41.4)	233	64.0	49	30.8	31	13.9	
Partial communication	191 (25.1)	74	20.3	59	37.1	58	26.0	
Open communication	230 (30.2)	52	14.3	48	30.2	129	57.9	<0.001
Value assigned to the truth (Truthful communication from the professional to the patient)								
Low	383 (50.3)	205	56.3	81	50.9	91	40.8	
Moderate	198 (26.0)	90	24.7	43	27.0	62	27.8	
High	163 (21.4)	65	17.9	32	20.1	66	29.6	0.003
Attitude towards death								
Low acceptance	321 (42.2)	157	43.1	65	40.9	95	42.6	
Moderate acceptance	237	120	33.0	46	28.9	69	30.9	

	(31.1)								
High acceptance	177 (23.3)	78	21.4	45	28.3	51	22.9	0.56	
Bioethics courses									
None	235 (31.4)	114	31.3	45	28.3	70	31.4		
≥ 1	514 (68.6)	246	67.6	110	69.2	150	67.3	0.81	
Religion									
Believer	519 (68.2)	271	74.5	103	64.8	137	61.4		
Nonbeliever	237 (31.1)	93	25.6	55	34.6	86	38.6	0.003	
Knowledge about IDD									
Low	317 (41.7)	147	40.4	67	42.1	100	44.8		
Intermediate	288 (37.8)	140	38.5	61	38.4	83	37.2		
Positive attitude and high knowledge	118 (15.5)	62	17.0	22	13.8	32	14.4	0.79	
Knowledge about ASD									
Low	191 (25.1)	86	23.6	40	25.2	62	27.8		
Intermediate	303 (39.8)	161	44.2	65	40.9	75	33.6		
Positive attitude and high knowledge	224 (29.4)	98	26.9	45	28.3	77	34.5	0.11	
Knowledge about ADHD									
Low	296 (38.9)	162	44.5	54	34.0	77	34.5		
Intermediate	247 (32.5)	100	27.5	56	35.2	87	39.0		
Positive attitude and high knowledge	173 (22.7)	87	23.9	40	25.2	44	19.7	0.01	

¹ Not all percentages add up to 100%, due to missing values. ² Chi² test.

Table 2. Factors associated with low paternalism/autonomism of health professionals in Mexico, 2018.

<i>Variables</i>	<i>n</i> (%)	OR ¹	Multiple ²	
			95% CI	
Age				
43-76 years	229 (30.1)	1.0		
30-42 years	234 (30.8)	0.79	0.51	1.24
19-29 years	280 (36.8)	0.72	0.46	1.13
Gender				
Male	310 (40.7)	1.0		
Female	440 (57.8)	1.57	1.11	2.22
Specialty				
No	328 (43.1)	1.0		
Yes	425 (55.9)	1.67	1.16	2.40
Familiar with some IDD/ASD				
Yes	132 (17.4)	1.0		
No	630 (81.1)	0.98	0.64	1.50
Value assigned to the truth (Truthful communication from the professional to the patient)				
Low	383 (50.3)	1.0		
Moderate	198 (26.0)	0.86	0.58	1.29
High	163 (21.4)	0.98	0.63	1.53
Communication pattern				
Withholding	315 (41.4)	1.0		
Partial communication	191 (25.1)	4.52	2.98	6.87
Open communication	230 (30.2)	12.13	7.71	19.05
Bioethics courses				
None	235 (31.4)	1.0		
≥ 1	514 (68.6)	0.76	0.53	1.11
Knowledge about IDD				
Low	317 (41.7)	1.0		
Intermediate	288 (37.8)	0.75	0.52	1.08
Positive attitude and high knowledge	118 (15.5)	0.62	0.39	1.01
Knowledge about ASD				
Low	191 (25.1)	1.0		
Intermediate	303 (39.8)	0.60	0.40	0.91
Positive attitude and high knowledge	224 (29.4)	1.04	0.67	1.63
Knowledge about ADHD				
Low	296 (38.9)	1.0		

Intermediate	247 (32.5)	1.27	0.85	1.89
Positive attitude and high knowledge	173 (22.7)	0.93	0.61	1.43

¹ Odds ratio, ordinal logistic regression. ² Odds ratio, adjusted by all variables included in table, participant institution (medical facility/university) and religion.

Table 3. Association of communication attributes and **specialty** with low paternalism/autonomism in health professionals: age modifying effect in Mexico, 2018.

<i>Variables</i>	19 - 29 years		30 - 42 years		43 - 76 years		<i>p</i> Value
	OR ¹	95% CI	OR ¹	95% CI	OR ¹	95% CI	
Communication pattern							
Withholding	1.0		1.0		1.0		
Partial communication	2.73	1.40 5.32	10.23	4.46 23.51	5.57	2.49 12.49	
Open communication	11.10	5.31 23.10	26.26	10.43 66.10	11.48	4.68 28.15	
<i>Interaction term</i>							<i><0.001</i>
Specialty							
No	1.0		1.0		1.0		
Yes	0.94	0.54 1.63	2.87	1.24 6.64	2.03	0.98 4.21	
<i>Interaction term</i>							<i>0.03</i>

¹ Odds ratio adjusted by gender, familiar with some IDD/ASD, value **assigned** to the truth, bioethics courses, religion, participant institution (medical facility/university), and knowledge about IDD, ASD, and ADHD.