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Parental Attitude towards the Prescription of Psychotropic Medications for Mental Disorders in Children in a Tertiary Care University Hospital in Oman

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Abstract

Objectives: This study investigated parental attitudes towards psychotropic drugs for children's mental disorders. ***Methods*:** A questionnaire was distributed to parents of children attending a child psychiatry clinic at a tertiary hospital in Muscat, Oman. Similarly, in a small proportion, other caregivers filled out the questionnaire in case the child attended with them. The questionnaire comprised questions regarding parents' opinions, and attitudes about psychotropic medications use. The logistic regression model was used to identify the risk factors associated with parents who prefer to consult a folk healer (FH) for children with mental disorders. ***Results*:** A total of 299 parents agreed to participate in the study. The majority of them (81.6%, n=244) agreed that they would give their child psychotropic medications if necessary, but 25.4% of them (n=76) would consult a FH before consulting a psychiatrist if their child experienced psychiatric symptoms. Married parents were 14 times (OR=14.5, p=0.011) more likely to consult a FH than were separated or divorced parents. Caregivers with a monthly income below 500 OMR and

between 500-1,000 OMR were two times (OR=2.5, p=0.016) and three times (OR=3.2, p<.001), respectively, more likely to consult a FH than those with a monthly income of more than 1,000 OMR. Parents who disagreed with giving psychotropic medications to their children were three times (OR=3.7, p<.001) more likely to consult a FH than were parents who agreed to give psychotropic medications to their children if necessary. ***Conclusion*:** Most parents agreed to give their children psychotropic medications if it were deemed necessary. However, a sizeable proportion of parents and caregivers preferred to consult a FH before accessing mental health services.

Keywords: Parents; Children; Attitudes; Psychotropic Drugs; Oman.

Advances in Knowledge

-As a flagship institute, the Sultan Qaboos University Hospital aims to provide all our service users with the best care.

-Therefore, this study helped us identify the parents' and caregivers' opinions, concerns, and perceptions on the use of psychotropic medications in children.

Application to Patient Care

-The results of this study and its implications will help us better understand parents' and caregivers' attitudes towards using psychotropic medications in children.

-In addition, the feedback will help us develop parent support groups to discuss the concerns further and improve our services, which translates into better concordance and compliance with the formulated management plan.

Introduction

The number of evidence-based treatments for child psychiatry is growing.[1,2] There has been a dramatic rise in the use of psychiatric drugs in children over the past four decades.[3-5] Unfortunately, studies have shown a sceptical view and stigma among parents and caregivers of psychiatric patients on using psychotropic medications for their children. [6,7] Therefore, most families prefer psychotherapy over drugs, even when psychopharmacological agents are deemed crucial. [8,9] Previous studies suggest that parents are reluctant to commence their children on psychotropic medications. This attitude is due to concerns about severe and harmful side effects,

leading to reducing or stopping the medication earlier than recommended. [10] In addition, studies identified existing racial/ethnic disparities among parents agreeing to prescribe psychotropic medications for their children. For example in the USA, White children are more likely to receive psychotropic drugs than Black and Latino children. [11,12] However, the view of and attitude toward the use of psychotropic medications in children in Oman have never been explored. Therefore, understanding the cultural context and establishing relationships between mental health care providers and parents may offer the best strategies for reducing the negative parental perceptions relating to prescribing psychotropic medications for their children.

The current study aims to explore and understand the opinion and attitudes of Omani parents towards prescribing psychotropic medications to their children with mental disorders. It is hoped that child psychiatrists will alleviate parental concerns regarding psychotropic medications use in their children and effectively reduce parental stigma regarding mental health.

Methods

Study design, settings and participants

This cross-sectional study was conducted at the Department of Behavioural Medicine, Sultan Qaboos University Hospital (SQUH) in Oman, between December 2020 and March 2021. In this study, all patients aged younger than 18 years who were attending their regular appointment at the child and adolescent clinic during the study period were eligible to be included in the study which was a total of approximately 450. However, parents or caregivers of patients older than 18 years of age and those of children below 18 who did not consent were excluded from the study.

Data collection and handling

The data collection took place in the child psychiatry outpatient clinic at SQUH while patients were waiting for their appointment**.** The study was carried out between December 2020 and March 2021. All parents of attendees of the child psychiatry outpatient services at SQUH during the study period were included in the study. Information on the nature and goals of the research, the right to anonymity, and the right to withdraw at any stage with no effect on the clinical care was disseminated to the participants. The questionnaire was offered in Arabic, the first language of most participants, and an English version was an option for the participants who preferred

filling it in English. It consisted of two parts, namely, socio-demographic and clinical factors, and the data collected included the age, gender, and the diagnosis of the child (neurodevelopment disorder, mood disorder, psychotic disorder, others (epilepsy, genetic syndromes, metabolic syndromes), place of residence (urban, rural), age of parents, marital status (married, divorced, and separated), and educational level of parents; data regarding socioeconomic status (family monthly income) and occupation were also collected. The second part of the questionnaire looked into parents' opinions, knowledge, and attitudes about children's psychotropic medications. Anonymised data were saved on a password-protected electronic database and securely destroyed following the code of conduct for handling research data (UKRIO, 2009). Signed consent forms were stored separately in a locked compartment.

Sample size calculation and sampling method

The required sample size was calculated using MedCal software, allowing for a 95% confidence interval, a 5% type I error, and 80% power. The minimum sample size was calculated to be 260.

A simple random sampling method was used to recruit the study participants from the list of patients expected to attend the child and adolescent clinic during the study period. Randomiser software generated a list of participants. Those selected randomly and who did not meet the inclusion criteria or opted not to participate were substituted with the next randomly selected participant chosen to fulfil the required sample size. Considering a 20% attrition rate, including non-completed questionnaires and unsigned consent forms, 299 participants were recruited.

Data analysis:

Descriptive statistics, including mean, standard deviation (SD), median, range, frequency, and percentage, were used to report participants' demographic and clinical data and response to the use of children's psychotropic medications. The dependent variable is from one attitude question: "If your child experienced psychiatric symptoms, would you first consult a FH before consulting a psychiatrist? Yes/No'. Those parents who replied 'Yes' were categorised as the 'Prefer FH' group, and otherwise as the 'Non-FH' group. Univariate comparison between the two groups (Yes vs No) was evaluated using Chi-square / Fisher's exact test to explore demographic, clinical, and other attitudes variables. Those variables with $p < 0.05$ in the univariate analysis

were included in the multivariate logistic (Wald) regression for further analysis to identify the risk factors associated with the 'Prefer FH' group. All statistics, including the Odds ratio (OR) with 95% confidence intervals (CI), were obtained by the Statistical Package for the Social Sciences (SPSS), version 27.0 (IBM SPSS Inc. Chicago, IL, USA), set at a 5% level of significance.

Ethical approval

Ethical approval was granted by the College of Medicine and Health Sciences at Sultan Qaboos University, Muscat, Oman. The study was conducted as per the Declaration of Helsinki and the American Psychological Association regarding human ethical research, including confidentiality, privacy, and data management. Written informed consent was obtained from the participants.

Results

Profile of the participants

Details of the profiles of the respondents are shown in Table 1. A total of 299 parents and caregivers agreed to participate in the study, with a response rate of 95% (299/314). The basic demographic breakdown of the respondents was 117 (39.1%) fathers, 156 (52.1%) mothers, and 26 (8.7%) other caregivers. The majority of the fathers (75%, n=223) had a high school certificate or higher, almost 40% (n=119) ranged between 30 to 40 years old, and most (77.3% n=231) were employed. The majority of the mothers (76%, n=228) had a high school certificate or higher, more than half (52.8%, n=158) were between 30 to 40 years old, and more than half were unemployed (59.2%, n=177). The majority of the parents were living in an urban area (81.3%, n=243), were married (91.6%, n=274), and more than half of them had a monthly income of up to OMR 1,000 (56%, n=170). For the children, there were more male patients (68.2%, n=204) than females (31.8%, n=95). The majority had an age range of below 10 years old (44.9%, n=134), and more than (74%, n=224) had a diagnosis of neurodevelopmental disorders, followed by psychotic disorder (13.7%), mood disorder (8.7%), and other conditions like epilepsy (3.6%). Tables 2 shows the response to questions on attitudes towards psychotropic medications, the majority of them replied that they did not suffer from a psychiatric disorder (86.3%, n=258), had never taken any psychiatric medications (88.3%, n=264), had no family member with a psychiatric illness (66.2%, n=198), and had no family member who had taken

any psychiatric medications (67.9%, n=203). Regarding the beliefs the respondents had about the use of psychotropic medicines in children, 44% (n=132) believed that these medications lead to addiction in children, 27% (n=82) thought that they cause brain damage, and 28% (n=85) had concerns about the serious side effects of these medications. The majority of the respondents (92%, n=274) preferred psychotherapy as the first step of treatment for their children. However, 82% (n=244) agreed to give their child psychotropic medications if necessary, whereas 25.4% of them (n=76) would consult a FH before consulting a psychiatrist if their child experienced psychiatric symptoms.

Risk factors associated with parents preferred folk healer

Table 3 shows the univariate and multivariate (logistic) analysis of the demographic and attitudes towards psychotropic medications variables associated with a preference to consult a FH. In the univariate analysis, the results showed that marital status (p=0.010), monthly income (p<.001), education level (p=0.026), and employment status (p=0.026) of the mother were linked to a negative attitude towards the use of psychotropic medications in children (p<.001) and were significantly associated with parents who would prefer to consult a FH.

In the multivariate analysis shown in Table 4, the logistic (Wald) regression showed that marital status, monthly income, and attitudes towards giving psychotropic medications to their children if necessary were significant risk factors for parents to prefer to consult a FH. According to the Hosmer-Lemeshow goodness-of-fit test ($\chi 2$=0.567, p=0.967), the model had a good fit with a predicting power of 65.9%. Married parents were 14 times (OR=14.5, p=0.011) more likely to consult a FH than were separated/divorced parents. Those parents with a monthly income below 500 OMR and between 500-1,000 OMR were two times (OR=2.5, p=0.016) and three times (OR=3.2, p<.001), respectively, more likely to prefer to consult a FH than were those with a monthly income of more than 1,000 OMR. Regarding the attitude question, parents who disagreed with giving psychotropic medications to their children were three times (OR=3.7, p<.001) more likely to consult a FH than were parents who agreed to give psychotropic medications to their children if necessary.

Discussion

Over the past decades, there has been a rise in the prescription of psychotropic medications for mental health difficulties in children and adolescents. [13]Oman is a country with a predominantly youthful population, and its economic growth and rapid demographic shift are witnessing a surge in young people with mental health problems. [14]Yet, many do not seek care from qualified mental health professionals. [15]However, since the development of child and adolescent mental health services (CAMHS) in Oman in the late 1990s, several challenges have emerged, specifically, the maldistribution and scarcity of services for young people and the lack of a mental health act. [116,17] This study identified parents' and caregivers' attitudes and concerns about using psychiatric medications for children attending the CAMHS in SQUH. In this study, one of the caregivers' central beliefs regarding psychotropic medicines was that they lead to addiction, which was present in 44% (n=132) of the respondents, which echoes the findings of other studies. [8,9] Similarly, close to 28% (n=85) of the respondents believed that the medications may lead to toxic and severe side effects, which is in line with a plethora of studies in the literature with similar findings. [18,19] Regarding treatment modalities, the majority of the respondents preferred psychotherapy as a treatment for their children, and this is consistent with the results of international studies in which parents chose counselling as the first line of treatment and believed it to be beneficial and to have fewer risks compared to medications. [20]

Furthermore, although the vast majority of parents agreed they would give medications to their children if necessary, 25.4% (n=76) of them would first consult an FH, probably due to the socio-cultural beliefs and social stigma associated with mental disorders. [21]In our study, parents who disagreed with giving psychotropic medications to their children were three times (OR=3.7, p<.001) more likely to consult an FH than were parents who agreed to prescribe psychotropic medications to their children if necessary. Therefore, consulting an FH before accessing mental health services causes a treatment delay and probably may result in negative mental health consequences. [21] On analysing the sociodemographic factors associated with consulting an FH prior to a psychiatrist, we found that marital status, unemployment, lower income, and lower education level had significant associations. In addition, the existing literature suggests that being single was associated with a higher tendency to visit an FH. [22]Still, in our study, the finding was the opposite, as married couples were more likely to consult FHs; however, this is not necessarily

accurate, as more than 90% of the parents in this study were married, and the overall prevalence of single-parent families in Oman is low.

Moreover, the results of our research showed that respondents with the education of grade 12 or lower were more likely to consult FHs, and the same applied to those with lower income and unemployment; this concurs with studies done elsewhere. [23]Furthermore, it is common for those living in low and middle-income countries to access FHs; [24]however, Oman is a high-income country, yet, based on the findings of our study, it remains influenced by such practices. Therefore, even in wealthier countries, the relative popularity of FHs and alternative medicine should be scrutinised in the context of broader social, cultural, and religious perspectives, as local values and beliefs influence people in making such decisions, [25] which confers with a crucial national-level study conducted in Oman suggesting underutilization of health care services in people with mental health difficulties [26] Finally, in Oman and the wider Arab region, there is a need for culturally-specific psychoeducation to address the contextual and socio-religious factors and the stigma to improve access to mental health services. [27,28]

Despite sharing emerging information from Oman, the study has some limitations. Because of the social stigma, some responses given by parents, particularly in relation to personal or family history with regard to psychiatric problems, might be unreliable and should be treated with caution. Conducting the study in a city like Muscat, although people from other parts of Oman were included, may have missed a large proportion of the wider Omani community. Moreover, it is essential to acknowledge that the study is subjective and quite a bit of the finding depend on the parents' opinions which different factors could influence.

Conclusion

Most parents agreed they would give their children psychotropic medications if deemed necessary. However, a sizeable proportion of parents and caregivers preferred to consult an FH before accessing mental health services. Parents' opinions and beliefs on psychotropic medications are not in line with the scientific facts. Concerted efforts and increased awareness are needed to address parents' concerns regarding the safety and effectiveness of psychotropic medications in children to improve treatment outcomes. Moreover, incorporating psychosocial

and behavioural interventions, parent training, and psychiatric rehabilitation must be an integral part of the holistic approach to managing the mental health difficulties of children and young people. Overall, mental health professionals play a significant role in promoting the best practices in the Middle East region and offering psychoeducation to parents and caregivers on the safe use and side effects of psychiatric medications in children, and them in shared decision-making about medication regimens.

Authors' Contribution

HM designed the study, drafted and critically reviewed the manuscript. SAH, MAS, TAM, and MAB collected the data, while MFC analysed the data and interpreted the results. AAH revised the manuscript. All authors approved the final version of the manuscript.

Conflicts of Interest

The authors declare that there are no conflicts of / or competing interests.

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References

1. Unwin GL, Deb S. Efficacy of atypical antipsychotic medication in the management of behaviour problems in children with intellectual disabilities and borderline intelligence: a systematic review. Res Dev Disabil. 2011 Nov-Dec;32(6):2121-33. doi: 10.1016/j.ridd.2011.07.031.
2. Cortese S, Adamo N, Del Giovane C, Mohr-Jensen C, Hayes AJ, et al. Comparative efficacy and tolerability of medications for attention-deficit hyperactivity disorder in children, adolescents, and adults: a systematic review and network meta-analysis. Lancet Psychiatry. 2018 Sep;5(9):727-738. doi: 10.1016/S2215-0366(18)30269-4.
3. Zito JM, Safer DJ, dosReis S, Gardner JF, Boles M, Lynch F. Trends in the prescribing of psychotropic medications to preschoolers. JAMA. 2000 Feb 23;283(8):1025-30. doi: 10.1001/jama.283.8.1025.

4. Girand HL, Litkowiec S, Sohn M. Attention-Deficit/Hyperactivity Disorder and Psychotropic Polypharmacy Prescribing Trends. Pediatrics. 2020 Jul;146(1):e20192832. doi: 10.1542/peds.2019-2832. Epub 2020 Jun 2.
5. Wong IC, Murray ML, Camilleri-Novak D, Stephens P. Increased prescribing trends of paediatric psychotropic medications. Arch Dis Child. 2004 Dec;89(12):1131-2. doi: 10.1136/adc.2004.050468. Erratum in: Arch Dis Child. 2005 Feb;90(2):219.
6. Hamrin V, McCarthy EM, Tyson V. Pediatric psychotropic medication initiation and adherence: a literature review based on social exchange theory. J Child Adolesc Psychiatr Nurs. 2010 Aug;23(3):151-72. doi: 10.1111/j.1744-6171.2010.00237.x.
7. Gronholm PC, Ford T, Roberts RE, Thornicroft G, Laurens KR, Evans-Lacko S. Mental health service use by young people: the role of caregiver characteristics. PLoS One. 2015 Mar 26;10(3):e0120004. doi: 10.1371/journal.pone.0120004.
8. Al-Haidar FA. Parental attitudes toward the prescription of psychotropic medications for their children. J Family Community Med. 2008 Jan;15(1):35-42.
9. Lazaratou H, Anagnostopoulos DC, Alevizos EV, Haviara F, Ploumpidis DN. Parental attitudes and opinions on the use of psychotropic medication in mental disorders of childhood. Ann Gen Psychiatry. 2007 Nov 15;6:32. doi: 10.1186/1744-859X-6-32.
10. McLaren JL, Barnett ER, Acquilano SC, Concepcion Zayas MT, Drake RE, et al. Psychotropic Polypharmacy and Antipsychotics in Children: A Survey of Caregiver's Perspectives. Community Ment Health J. 2022 Apr;58(3):512-516. doi: 10.1007/s10597-021-00845-2. Epub 2021 May 31.
11. Cook BL, Carson NJ, Kafali EN, Valentine A, Rueda JD, et al. Examining psychotropic medication use among youth in the U.S. by race/ethnicity and psychological impairment. Gen Hosp Psychiatry. 2017 Mar-Apr;45:32-39. doi: 10.1016/j.genhosppsych.2016.12.004. Epub 2016 Dec 15.
12. Cummings JR, Ji X, Lally C, Druss BG. Racial and Ethnic Differences in Minimally Adequate Depression Care Among Medicaid-Enrolled Youth. J Am Acad Child Adolesc Psychiatry. 2019 Jan;58(1):128-138. doi: 10.1016/j.jaac.2018.04.025. Epub 2018 Oct 17.
13. Pescosolido BA, Perry BL, Martin JK, McLeod JD, Jensen PS. Stigmatizing attitudes and beliefs about treatment and psychiatric medications for children with mental illness. Psychiatr Serv. 2007 May;58(5):613-8. doi: 10.1176/ps.2007.58.5.613.14. Al-Sharbati

MM, Al-Farsi YM, Al-Sharbati ZM, Al-Sulaimani F, Ouhtit A, Al-Adawi S. Profile of Mental and Behavioral Disorders Among Preschoolers in a Tertiary Care Hospital in Oman: A Retrospective Study. Oman Med J. 2016 Sep;31(5):357-64. doi: 10.5001/omj.2016.71.

15. Al-Adawi S. Tomorrow's People Matters: Evidence for Action in Oman. Oman Med J. 2014 Mar;29(2):83-5. doi: 10.5001/omj.2014.21.

16. Mirza H. Child and Adolescent Mental Health Services in Oman. London J Prim Care (Abingdon). 2018 Jun 8;10(4):121-122. doi: 10.1080/17571472.2018.1482661.17. Al-Maamari A, Al-Kindi Q, Mirza H. Ethical Dilemmas in Child and Adolescent Mental Health Services in Oman. *Ethics Soc Welf*. 2021;15(2):219-223. doi:10.1080/17496535.2021.1897641. 6535.2021.1897641

18. Dodangi N, Vameghi R, Habibi N. Evaluation of Knowledge and Attitude of Parents of Attention Deficit/Hyperactivity Disorder Children towards Attention Deficit/Hyperactivity Disorder in Clinical Samples. Iran J Psychiatry. 2017 Jan;12(1):42-48.

19. Stevens J, Wang W, Fan L, Edwards MC, Campo JV, Gardner W. Parental attitudes toward children's use of antidepressants and psychotherapy. J Child Adolesc Psychopharmacol. 2009 Jun;19(3):289-96. doi: 10.1089/cap.2008.0129.

20. Kaur D, Verma R, Ghildiyal R. Attitudes and perceptions of parents towards child and adolescent psychiatric consultation, diagnosis and treatment. BJPsych Open. 2021 Jun 18;7(Suppl 1):S262–3. doi: 10.1192/bjo.2021.700.21. Al-Alawi M, Al-Sinawi H, Al-Adawi S, Jeyaseelan L, Murthi S. Public perception of mental illness in Oman: a cross sectional study. *Int J Cult Ment Health*. 2017;10(4):389-399. doi:10.1080/17542863.2017.1325916.

22. Younis MS, Lafta RK, Dhiaa S. Faith healers are taking over the role of psychiatrists in Iraq. Qatar Med J. 2019 Nov 29;2019(3):13. doi: 10.5339/qmj.2019.13.

23. Zingela Z, van Wyk S, Pietersen J. Use of traditional and alternative healers by psychiatric patients: A descriptive study in urban South Africa. Transcult Psychiatry. 2019 Feb;56(1):146-166. doi: 10.1177/1363461518794516. Epub 2018 Oct 3.

24. Gureje O, Nortje G, Makanjuola V, Oladeji B, Seedat S, Jenkins R. The role of global traditional and complementary systems of medicine in treating mental health problems. Lancet Psychiatry. 2015 Feb;2(2):168-177. doi: 10.1016/S2215-0366(15)00013-9.

25. McGregor KJ, Peay ER. The choice of alternative therapy for health care: testing some propositions. Soc Sci Med. 1996 Nov;43(9):1317-27. doi: 10.1016/0277-9536(95)00405-x. Erratum in: Soc Sci Med 1996 Apr;42(7):III.

26. Al Riyami AA, Al Adawi SH, Al Kharusi HA, Morsi MM, Jaju SS. Health services utilization by school going Omani adolescents and youths with DSM IV mental disorders and barriers to service use. Int J Ment Health Syst. 2009 Sep 25;3(1):22. doi: 10.1186/1752-4458-3-22.

27. Elhusein B, Eltorki Y, Abdallah O, El Tahir M. Antipsychotic prescribing for patients with intellectual disabilities and challenging behaviours. *Adv Ment Health Intellect Disabil*. 2021;15(2/3):79-88. doi:10.1108/amhid-11-2020-0030.

28. Al-Huseini S, Al-Barhoumi A, Al-Balushi M, Al-Hosni A, Al-Mahrouqi T, et al. Effectiveness and Adverse Effects of Risperidone in Children with Autism Spectrum Disorder in a Naturalistic Clinical Setting at a University Hospital in Oman. Autism Res Treat. 2022 Jan 31;2022:2313851. doi: 10.1155/2022/2313851.

Table 1. Basic demographic profile of the parents/caregivers/child (n=299)

Demographic	**n (%)**	**Demographic**	**n (%)**
Child's gender		*Place of residence*	
Boy	204 (68.2)	Urban	243 (81.3)
Girl	95 (31.8)	Rural	56 (18.7)
Age (years) of the child		*Marital status of the parents*	
<= 10	134 (44.9)	Married	274 (91.6)
11-15	94 (31.4)	Separated	13 (4.3)
> 15	71 (23.7)	Divorced	12 (4.0)
Diagnosis of the child		*Income per month (OMR)*	
Neurodevelopmental disorder	224 (74.9)	< 500	69 (23.1)
Mood disorder	26 (8.7)	500-1,000	101 (33.8)

	Psychotic disorder	41 (13.7)	1,001-2,000	74 (24.8)
	Other (e.g., epilepsy)	8 (2.7)	> 2,000	55 (18.4)
Age (years) of father			*Age (years) of mother*	
	< 30	7 (2.3)	< 30	20 (6.7)
	30-40	119 (39.8)	30-40	158 (52.8)
	41-50	119 (39.8)	41-50	113 (37.8)
	> 50	54 (18.1)	> 50	8 (2.7)
Education level of father			*Education level of mother*	
	Illiterate to grade 11	76 (25.4)	Illiterate to grade 11	71 (23.7)
	Grade 12	98 (32.8)	Grade 12	105 (35.1)
	Diploma and above	125 (41.8)	Diploma and above	123 (41.1)
Employment status – father			*Employment status - mother*	
	Employed	231 (77.3)	Employed	102 (34.1)
	Unemployed	13 (4.3)	Unemployed	177 (59.2)
	Retired	55 (18.4)	Retired	20 (6.7)
Respondents				
	Father	117 (39.1)		
	Mother	156 (52.2)		
	Other caregiver	26 (8.7)		

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Table 2. Frequency of responses to the questionnaire on attitudes towards the prescription of psychotropic medications in children

Q1. Would you agree to give your child psychotropic medications if necessary?		***Q2.*** Do you suffer or have you suffered from a psychiatric disorder?	
Yes	244 (81.6)	Yes	41 (13.7)
No	55 (18.4)	No	258 (86.3)

Q3. Have you ever taken psychiatric medication?			***Q4.*** Has any member of your family experienced a psychiatric disorder?	
	Yes	35 (11.7)	Yes	101 (33.8)
	No	264 (88.3)	No	198 (66.2)
Q5. Has any member of your family taken psychiatric medication?			***Q6.*** What is your concern regarding the use of psychotropic medication in children?	
	Yes	96 (32.1)	It causes addiction	132 (44.1)
	No	203 (67.9)	It causes brain damage when used for long periods.	82 (27.4)
			It has serious side effects.	85 (28.4)
Q7. If your child were diagnosed with a psychiatric disorder, would you prefer your child to receive psychotherapy before being started on medication?			***Q8.*** If your child experienced psychiatric symptoms, would you first consult a folk healer before consulting a psychiatrist?	
	Yes	274 (91.6)	Yes	76 (25.4)
	No	25(8.4)	No	223 (74.6)

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Table 3. Univariate and multivariate (logistic) analysis showing the association between respondents' attitude towards consulting a folk healer and demographic factors

	Q8. Preferred to consult a folk healer		**Univariate[#]**	**Multivariate[~]**	
	Yes (n=76, 25.4%)	**No (n=223, 74.6%)**			
Factor	**n (%)**	**n (%)**	***p*-value**	**OR**	***p*-value**

Demographic					
Respondents					
Father	33 (43.4)	84 (37.7)	0.794		
Mother	35 (46.1)	121 (54.3)	0.354		
Other caregiver (ref)	8 (10.5)	18 (8.1)			
Child's gender					
Boy	54 (71.1)	150 (67.3)	0.540		
Girl (ref)	22 (28.9)	73 (32.7)			
Age (years) of the child					
<= 10	30 (39.5)	104 (46.7)	0.485		
11-15	27 (35.5)	67 (30.0)	0.781		
> 15 (ref)	19 (25.0)	52 (23.3)			
Diagnosis of the child					
Neurodevelopmental disorder	53 (69.7)	171 (76.7)	0.404^		
Mood disorder	8 (10.5)	18 (8.1)	0.997^		
Psychotic disorder	12 (15.8)	29 (13.0)	0.687^		
Other (e.g., epilepsy) (ref)	3 (3.9)	5 (2.2)			
Place of residence					
Urban	57 (75.0)	186 (83.4)	0.105		
Rural (ref)	19 (25.0)	37 (16.6)			
Marital status of the parents					
Married	75 (98.7)	199 (89.2)	0.010	14.512	0.011*
Separated/divorced (ref)	1 (1.3)	24 (10.8)			
Income per month (OMR)					
<500	18 (23.7)	51 (22.9)	0.098	2.519	0.016*
500-1,000	37 (48.7)	64 (28.7)	<.001	3.185	<.001*
>1,000 (Ref)	21 (27.7)	108 (48.4)			
Age (years) of father					
<=40	37 (48.7)	89 (39.9)	0.211		
41-50	28 (36.8)	91 (40.8)	0.645		

	> 50 (ref)	11 (14.5)	43 (19.3)			
Education level of father						
	Illiterate to grade 11	23 (30.3)	53 (23.8)	0.227		
	Grade 12	26 (34.2)	72 (32.3)	0.484		
	Diploma and above (ref)	27 (35.5)	98 (43.9)			
Employment status – father						
	Unemployed/retired	20 (26.3)	48 (21.5)	0.389		
	Employed (ref)	56 (73.7)	175 (78.5)			
Age (years) of mother						
	<=40	45 (59.2)	133 (59.7)	0.967^		
	41-50	29 (38.2)	84 (37.7)	0.986^		
	> 50 (ref)	2 (2.6)	6 (2.7)			
Education level of mother						
	Illiterate to grade 11	19 (25.0)	52 (23.3)	0.258		
	Grade 12	34 (44.7)	71 (31.8)	0.026		
	Diploma and above (ref)	23 (30.3)	100 (44.8)			
Employment status – mother						
	Unemployed/retired	58 (76.3)	139 (62.3)	0.026		
	Employed (ref)	18 (23.7)	84 (37.7)			

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Table 4. Univariate and multivariate (logistic) analysis on respondents' attitude towards consulting a folk healer in association with using psychotropic medications in children

			Univariate[#]	**Multivariate[~]**	
			***p*-value**	**OR**	***p*-value**
Q1. Would you agree to give your child psychotropic medications if necessary?					
	No	25 (32.9)	30 (13.5)	<.001	3.754	<.001*
	Yes (ref)	51 (67.1)	193 (86.5)			
Q2. Do you suffer or have you suffered from a psychiatric disorder?						
	Yes	8 (10.5)	33 (14.8)	0.350		

	No (ref)	68 (89.5)	190 (85.2)			
Q3. Have you ever taken psychiatric medication?						
	Yes	8 (10.5)	27 (12.1)	0.711		
	No (ref)	68 (89.5)	196 (87.9)			
Q4. Has any member of your family experienced a psychiatric disorder?						
	Yes	26 (34.2)	75 (33.6)	0.927		
	No (ref)	50 (65.8)	148 (66.4)			
Q5. Has any member of your family taken psychiatric medication?						
	Yes	24 (31.6)	72 (32.3)	0.909		
	No (ref)	52 (68.4)	151 (67.7)			
Q6. What is your concern towards the use of psychotropic medication in children?						
	It causes addiction.	39 (51.3)	93 (41.7)	0.076		
	It causes brain damage when used for long periods.	21 (27.6)	61 (27.4)	0.291		
	It has serious side effects (ref).	16 (21.1)	69 (30.9)			
Q7. If your child were diagnosed with a psychiatric disorder, would you prefer your child to receive psychotherapy before being started on medication?						
	Yes	68(89.5)	206(92.4)	0.287		
	No (ref)	8(10.5)	17(7.6)			
#, □2 test; ^, Fisher's Exact test; *, sig., p<0.05; Ref: reference point; OR, Odds ratio;						
□, Logistic (Wald) regression: Hosmer & Lemeshow test (□2=0.567, p=0.967); Nagelkerke R square=0.176; Sensitivity=60.5%, Specificity=65.8%, Overall=65.9%						

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