BMJ Open Paediatricians' attitudes and beliefs towards transgender people: a crosssectional survey in Israel

Nitsan Landau,^{1,2} Uri Hamiel ⁽¹⁾,^{2,3} Itay Tokatly Latzer,^{1,2} Elinor Mauda,¹ Noah Levek,¹ Liana Tripto-Shkolnik,^{2,4} Orit Pinhas-Hamiel ⁽¹⁾,²

ABSTRACT

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 ¹Pediatric Endocrine and Diabetes Unit, Edmond and Lily Safra Children's Hospital, Ramat-Gan, Israel
 ²Sackler School of Medicine, Tel Aviv University, Tel Aviv, Israel
 ³Pediatrics, Assaf Harofeh Medical Center, Zerifin, Israel
 ⁴Division of Endocrinology, Diabetes and Metabolism, Sheba Medical Center at Tel Hashomer, Ramat-Gan, Israel

Correspondence to

Dr Orit Pinhas-Hamiel; oritha@sheba.health.gov.il **Objective** The number of transgender and gender nonconforming children is on the rise. For these children, the timing of medical intervention is crucial, yet transgender children report poorer overall physical and mental health outcomes compared with their cisgender peers. We aim to describe how paediatricians perceive transgender people. **Setting** The 'Transgender Attitudes and Beliefs Scale', which consists of 29 items in three domains—human value, interpersonal comfort and sex/gender beliefs—was administered to 391 senior and resident paediatricians in Israel. The responses on a 7-point Likert scale were collapsed into two categories: a mean score of \geq 6 for each domain was a 'Favourable' perception and <6 'Unfavourable'.

Results Of 355 respondents (91% response rate), 221 (62%) were females, 132 (37%) were males and 2 identified as 'other'; 290 (82%) were born in 'trans-respect countries', 274 (77%) identified as secular, 223 (63%) were senior physicians and 132 (27%) were residents. Overall, 90% of the cohort scored favourably on the 'Human value' domain, 68% on 'Interpersonal comfort' and 40% on 'Sex/gender beliefs'. In the 'Interpersonal comfort' domain, being a man, birthplace in a transphobic country, identification as religious and being a senior physician were all associated with increased ORs for an unfavourable score: 2.1 (95% Cl 1.3 to 3.4), 3.4 (95% Cl 1.9 to 6.3), 2.4 (95% CI 1.4 to 4.2) and 1.8 (95% CI 1.1 to 3.0), respectively. In the 'Sex/gender beliefs' domain, being a man and identifying as religious had significantly increased ORs for unfavourable scores: 2.2 (95% Cl 1.3 to 3.5) and 10.6 (95% Cl 4.7 to 24.1), respectively. **Conclusions** Negative attitudes towards transgender people are still widespread among paediatricians. Interventions are warranted to positively impact these attitudes.

INTRODUCTION

Transgender is a term used to describe persons whose gender identity does not conform to the one assigned to them at birth. In the past decade, the medical community has turned a spotlight on the paediatric transgender population, in an attempt to remove barriers that may preclude proper care.¹ Paediatricians, who are on the front lines of this revolution, are becoming key figures for transgender

Strengths and limitations of this study

- Paediatricians are key figures in the care of transgender children, yet data are sparse regarding their perceptions of transgender persons; we therefore studied this important issue.
- ► The response rate of the paediatricians was high.
- A previously validated, multidimensional questionnaire was used.
- A limitation of the study is that variables such as education, knowledge and years since immigration to Israel were not assessed.

and gender non-conforming (TGNC) children and youth. First, accumulating evidence shows that the number of TGNC children is higher than previously thought.²⁻⁴ According to a recent US population-based study, 2.7% of teenagers in grades 9–11 self-defined as transgender.⁵ These children increasingly seek medical aid or advice from their paediatricians.¹

Second, for the children who seek medical intervention, time is in the essence, as current standard of care 'puberty blockers' should be given at the onset of puberty.⁶ Studies from the USA and the Netherlands demonstrated drastically reduced risk for added comorbidities following treatment, as well as improved physical and psychological outcomes.^{7–9} Thus, it is unfortunate that data also show that most children who were referred for treatment were in fact older than the optimal age for intervention at presentation.² ¹⁰ Moreover, even the establishment of a multidisciplinary gender clinic did not lead to a significant change in the age at presentation.²

Finally, transgender children report poorer overall physical and mental health outcomes compared with their cisgender peers, with greater prevalence of depression, anxiety, self-mutilation, substance abuse and suicide attempts.^{2 5 11} Yet psychopathology is not inevitable within this group; transgender

children who are supported in their gender identity have been shown to have developmentally normative levels of depression and only minimal elevations in anxiety.¹² As the first medical provider that transgender youth and their families generally encounter, the paediatrician has a critical role in supporting social transition and affirmation, and in coordinating appropriate referrals and follow-up.¹³ Recent years have attested to increasing public awareness regarding gender identity. Further, a policy statement issued by the Endocrine Society provides guidance for clinicians according to a gender-affirming approach.⁶ Nonetheless, almost one-third of transgender people who responded to the US National Transgender Discrimination Survey reported harassment in medical settings.¹⁴ Similar numbers were reported by LGBT (lesbian, gay, bisexual and transgender) parents seeking care for their children.¹⁵

Stigma can be defined as a set of negative beliefs about a group of people and may result in discriminatory behaviour. Physicians' stigma has long been established as a factor that can affect patient care and even reduce the intention to treat.^{16 17} Still, few studies to date have assessed physicians' attitudes towards TGNC, and paediatricians' attitudes have not been reported.

We sought to describe paediatricians' attitudes towards transgender people and to assess whether certain demographic and occupational characteristics of paediatricians are associated with more negative perceptions. Based on prior research, we hypothesised that females, physicians born in transrespect countries, those who did not identify as religious and resident physicians would have higher scores (figure 1).



Figure 1 Conceptual model of hypothesised relationships between the outcome and predictor variables. This model, based on the literature, was used in the construction of the regression models. We hypothesised that females physicians born in transrespect countries, those who did not identify as religious and resident physicians would have higher scores in all domains. A hierarchically arranged continuum was observed in which all the variables examined were associated with high scores of human values and lower scores on interpersonal comfort. Regarding the beliefs domain, no differences were observed between resident and senior physicians, and between those working in academic versus non-academic set-ups. Being a man, individuals who identified as being religious and those born in transphobic countries had higher ORs. Due to the cross-sectional design of the study, causality cannot be inferred from the results.

METHODS Study design and participants

In a cross-sectional survey, paediatricians were approached randomly at two semiannual paediatric assemblies, at seven hospitals and in five community clinics in Israel. At all locations, paediatrician identity was verified using a nametag or employee card, and the last four digits of the national personal identity number were recorded to avoid duplications. Consent was obtained, and participation was elective and anonymous.

A total of 391 physicians were approached between July 2017 and July 2018. After data screening, 368 participated. The final study cohort comprised 355 paediatricians, as 13 failed to fill the full questionnaire.

Patient and public involvement

Patients and the public were not involved in this study. Only paediatricians participated in the study, and the results were presented in the annual paediatricians' meeting in Israel.

MATERIALS

The previously validated 'Transgender Attitudes and Beliefs Scale' (TABS) questionnaire was chosen as the instrument for this study.¹⁸ TABS has demonstrated particular ability in capturing attitudes to transgender, compared with other scales that have been administered to medical personnel.¹⁹ Detailed information about validation of the questionnaire has been reported elsewhere.¹⁸ TABS consists of 29 items in three domains: (1)'Human values' domain (5 items), which assesses an individual's inherent value, for example 'Transgender individuals are valuable human beings regardless of how I feel about transgenderism'; (2) 'Interpersonal comfort' domain (14 items), which measures the respondent's level of comfort in daily interactions with transgender people, for example 'If I were introduced to a transgender person at a party, I would feel comfortable having a polite conversation with that person'; and (3) sex and gender beliefs domain (10 items), which assesses underlying beliefs in regard to gender, for example 'A person who is not sure about being a man or woman is mentally ill'.

Responses on TABS were rated on a 7-point Likert scale for each item, and ranged between 1 'strongly disagree' and 7 'strongly agree'. To minimise bias, the questionnaire includes a mix of positively and negatively stated items; negatively stated items were coded as 'R', and their scores were later analysed in reverse. Higher scores indicate positive perceptions. The possible raw ranges of each of the domains of the questionnaire are 5–35 for human values, 14–98 for interpersonal comfort and 10–70 for sex and gender beliefs.

The TABS questionnaire was translated according to the guidelines for translating and adapting tests issued by the International Test Commission.²⁰

In addition to the questionnaire, demographic occupational details were reported by the participants. The details recorded were gender ('Males', 'Females' or 'Other'); birth country as an open-ended question; religious identification as 'Secular' or 'Religious'; seniority as 'Senior paediatrician' (a physician who passed the postgraduate examinations in paediatrics) or 'Resident' (a physician who is under postgraduate training in the field of paediatrics); and the location of their primary practice as 'Community clinic' or 'Hospital' (for senior physicians only).

Data analysis

According to currently accepted guidelines for analysing data of Likert-type scales, differences between responses should not be assumed to be equidistant.²¹ Paediatricians' answers, given on a 7-point Likert scale, were collapsed into two categories: an equivalent of mean ≥ 6 for a specific domain was considered a favourable perception. Lower scores (<6) were categorised as 'Unfavourable'.

Paediatrician origin was categorised according to 'Trans-respect' versus 'Trans-phobic' birth country to assess the effect of cultural background on perceptions. The categorisation was delineated in the updated 'Legal and Social Map' issued by the organisation, Transgender Europe, and is based on political processes, and legal and social practices that concern transgender.²² For example, the USA, most European countries and Israel are considered as 'Trans-respecting' because of legal recognition for gender change, antidiscrimination legislation and transspecific healthcare services.

Statistical analyses

Statistical analyses were performed using SAS V.9.4. Descriptive statistics are presented as numbers (percentages) and median and IQR values. Univariate analysis was used to determine the relations between demographic groups and scale scores. The scales were analysed both as a continuous score and according to dichotomous categories: interpersonal comfort (below 84, greater or equal to 84), sex and gender beliefs (below 60, greater or equal to 60) and human value (below 30, greater or equal to 30). Scores using the continuous scales did not follow a normal distribution, and therefore were reported by median and IQR, and compared using the two-sample Wilcoxon test or Kruskal-Wallis test according to the number of groups compared. Categorical variables were reported by their relative frequencies and compared by the Pearson's χ^2 test. When results of the overall test were statistically significant, pairwise comparisons were performed. The Bonferroni method for adjustment of significance level was used. Spearman coefficients were calculated to examine the associations between the scales.

Multivariate logistic regressions were applied to the data to identify the significant independent predictors of the below-threshold values of each of the three scales. The predictors in each regression were sex, secular (yes vs no), seniority (yes vs no) and birthplace. A p value of 0.05 was considered significant.

RESULTS

The study cohort comprised 355 paediatricians, 221 (62%) were females, 133 (37%) weremales and 2 'others'; 290 (82%) were born in 'trans-respect' countries, 274 (77%) defined themselves as secular and 132 (37%) were residents. Of the 223 (63%) senior paediatricians, 124 (56%) worked mainly in hospitals and 102 (44%) mainly in community practice clinics. The median age of the participants was 40 years (IQR 33–54).

The Cronbach's alpha for the humanity subscale was 0.89, for the sex and gender beliefs subscale 0.87 and for interpersonal comfort 0.92. These values indicate excellent internal consistency in all subscales. For each of the three domains (human value, interpersonal comfort and sex/gender beliefs), scores were significantly higher for females than males, for secular than religious, and for respondents born in transrespect compared with transphobic countries (table 1). For the domain of interpersonal comfort, but not for the other two domains, residents scored significantly higher than senior physicians.

Overall, 90% of the paediatricians scored favourably (mean score ≥ 6) on the human values domain, 68% on the interpersonal comfort domain and only 40% on the sex/gender beliefs domain.

Subsequent analysis characterised the paediatricians who scored unfavourably (table 2). The characteristics that were found statistically significant on univariate analysis and were subsequently included in the multivariate model were being a man, 'transphobic' birthplace, religious identification and being a senior physician. These all increased the OR for an unfavourable score, for both the interpersonal comfort domain and the sex/gender beliefs domain. These trends were also observed among the senior physicians, between those working in the community and those working in hospitals. Since only 10% held 'unfavourable' attitudes regarding the human values domain, further analysis was not done regarding this scale.

In the multivariate analysis (table 3, figure 2A–D) of the interpersonal comfort domain, ORs for an unfavourable response were 2.1 (95% CI 1.3 to 3.4) for males versus females, 3.4 (95% CI 1.9 to 6.3) for respondents born in transphobic versus transrespect countries, 2.4 (95% CI 1.4 to 4.2) for religious versus secular identification, and 1.8 (95% CI 1.1 to 3.0) for senior versus resident paediatricians. In a subanalysis of senior paediatricians, no statistically significant difference was found between those working primarily in the community versus hospitals; the OR of an unfavourable response was 1.7 (95% CI 0.97 to 3.14) for mainly community versus mainly hospital paediatricians.

For the sex and gender beliefs domain, the OR for an unfavourable response was 2.2 (95% CI 1.3 to 3.5) for males versus females, 1.7 (95% CI 0.9 to 3.3) for being born in a transphobic versus transrespect country, 10.6 (95% CI 4.7 to 24.1) for religious versus secular paediatricians, and 1.5 (95% CI 0.9 to 2.4) for senior versus resident paediatricians. In a subanalysis of senior paediatricians,

 Table 1
 Median values and ranges of scores on the Transgender Attitudes and Beliefs Scale, according to characteristics of respondents

Characteristics	n (%)	Interpersonal comfort (14–98)	Sex/gender beliefs (10–70)	Human value (5–35)
All	355 (100)	86 (75–94)	57 (46–64)	35 (34–35)
Gender				
Females	221 (63)	89 (78–95)	59 (50–64)	35 (35–35)
Males	132 (37)	82 (64–92)	53 (42–61)	35 (31–35)
P value		<0.001	<0.001	<0.001
Religiosity				
Secular	274 (77)	89 (77–95)	59 (52–64)	35 (35–35)
Religious	81 (23)	80 (59–88)	44 (33–53)	35 (30–35)
P value		<0.001	<0.001	<0.001
Birth country*				
Transrespect	290 (82)	88 (78–95)	58 (49–64)	35 (35–35)
Transphobic	65 (18)	76 (60–87)	48 (40–61)	34 (29–35)
P value		<0.001	<0.001	<0.001
Experience				
Senior physician	223 (63)	84 (71–93)	56 (45–63)	35 (33–35)
Resident	132 (37)	90 (80–95)	58 (47–64)	35 (35–35)
P value		0.001	0.13	0.037

*The categories of 'Trans-respect' vs 'Trans-phobic' are based on political processes, and legal and social practices that concern transgender.

no significant difference was found; the OR of an unfavourable response was 1.4 (95% CI 0.7 to 2.6) for those working mainly in the community versus mainly in the hospital.

DISCUSSION

In this study of attitudes towards transgender people, 90% of paediatricians acknowledged the universal human value of transgender people, yet only two-thirds reported that they would feel comfortable interacting with transgender people, and most paediatricians displayed negative underlying sex/gender beliefs in regard to transgender. Additionally, certain characteristics of the respondents significantly increased the probability of having unfavourable perceptions: being a man, birthplace in a transphobic country, religious identification and being a senior physician rather than a resident physician increased the probability of not feeling 'Interpersonal comfort' in relation to transgender people. Being a man and religious identification increased the probability of having negative sex and gender beliefs.

We presume that the interpersonal comfort domain in the context of this study reflects interactions during medical encounters behind closed doors. Considerable previous works assessed interactions from a transgender point of view^{14 23} or by LGBT parents,¹⁵ and thus provide indirect measurements of physicians' degree of comfort. Our work is the first to directly assess the paediatricians' degree of comfort and may explain the results of previous indirect findings.

The sex/gender beliefs domain of the TABS reflects convictions that are held to be true without empirical evidence. Sixty per cent of the paediatricians in the current study expressed stigma regarding gender fluidity, despite the fact that only one-third reported they would feel interpersonal discomfort. This is an important distinction and may result in oblivious discrimination against transgender children.

Among paediatricians, the OR for males to feel less at ease when interacting with transgender persons and for having negative gender beliefs was twofold higher than for females. These findings corroborate data of a previous study of paediatricians that showed that women engage in significantly more active partnership behaviours, positive talk, psychosocial counselling, psychosocial question-asking and emotionally focused talk than do male physicians.²⁴ It has also been suggested that men are more invested than women in adhering to gender norms because they serve to affirm their own masculinity.^{25 26}

Paediatricians born in 'transphobic' rather than 'transrespect' countries expressed less comfort in interacting with transgender people. Although we did not assess the number of years since immigration to Israel, data suggest that immigrants tend to retain certain patterns of their old culture, if only in part, due to a desire to preserve their former identity and the need for a sense of

Table 2	Responses of paediatricians	to two domains of the	Transgender	Attitudes and Beliefs	Scale, according to
demogra	phic characteristics				

	Interpersonal comfort, n (%)		Sex/gender beliefs, n (%)	
Variable	Unfavourable (n=150)	Favourable (n=205)	Unfavourable (n=213)	Favourable (n=142)
Gender				
Females (n=221)	76 (34)	145 (66)	117 (53)	104 (47)
Males (n=132)	73 (55)	59 (45)	95 (72)	37 (28)
P value	<0.001		<0.001	
Birth country				
Transrespect (n=290)	106 (37)	184 (63)	167 (58)	123 (32)
Transphobic (n=65)	43 (66)	21 (44)	46 (71)	19 (29)
P value	<0.001		0.06	
Religiosity				
Secular (n=274)	103 (38)	171 (62)	139 (51)	135 (49)
Religious (n=81)	47 (58)	34 (42)	74 (91)	7 (9)
P value	0.001		<0.001	
Experience				
Residents (n=132)	40 (30)	92 (70)	69 (52)	63 (48)
Seniors (n=223)	110 (49)	113 (51)	144 (65)	79 (35)
P value	<0.001		0.022	
	Unfavourable (n=106)	Favourable (n=113)	Unfavourable (n=141)	Favourable (n=78)
Location of primary practice for senior paediatricians (n=219)				
Hospital (n=124)	50 (40)	74 (60)	75 (60)	49 (40)
Community (n=95)	56 (59)	39 (41)	66 (69)	29 (31)
P value	<0.01		0.17	

Responses of ≥6 on a 7-point Likert scale were considered 'favourable'. Responses of <6 were considered 'unfavourable'.

continuity. However, an important finding of this study is that unfavourable sex/gender beliefs were high in 'transphobic' and in 'trans-respect' groups, with no significant difference. While research has shown that contact and exposure in a variety of cultural dimensions positively correlate with more favourable attitudes towards a person with whom contact is made,²⁷ our data suggest that educational programmes are needed irrespective of place of birth.

Religiosity, defined by self-identification, was associated with a twofold increased risk of being uncomfortable with transgender people and a tenfold increased risk of having stigmatising gender beliefs. This concurs with previous studies that showed a lack of openness towards gender fluidity among religious physicians and healthcare staff.²⁸⁻³⁰ Most religions still hold traditional fixed beliefs in regard to gender. Other studies reported correlations of increased religiosity with more negative attitudes towards transgender persons.^{31–33} A systematic review reported evidence of a consistent association of self-religious identification with more negative attitudes towards transgender people and higher levels of transphobia. $^{\rm 34}$

Senior physicians expressed greater feelings of discomfort with transgender people than did residents. However, similar to the characteristics of cultural background, unfavourable sex/gender beliefs were high in both groups according to seniority, with no statistically significant difference between them. Previous studies revealed conflicting results regarding a correlation between younger age and more favourable attitudes. The 'generational replacement' hypothesis suggests that attitudes change due to younger generations growing up in a more open and accepting atmosphere, and that this, together with generation replacement, is a core tenet in attitude change.^{35 36} Accordingly, resident physicians in the USA, in contrast to senior physicians, showed more tolerant attitudes regarding various issues, such as substance abuse.³⁷ However, the findings of the current study suggest that negative sex/gender beliefs are more persistent than feelings of discomfort in interrelating with transgender persons.

Table 3 Multivariate analysis of an overall unfavourable (<6) vs favourable (\geq 6) response on two domains of the Transgender Attitudes and Beliefs Scale score, according to characteristics of respondents

	Interpersonal comfort		Sex/gender beliefs	
Effect	OR (95% CI)	P value	OR (95% CI)	P value
Gender				
Males	2.1 (1.3 to 3.4)	0.0013	2.2 (1.3 to 3.5)	0.0032
Females	1		1	
Birthplace				
Transphobic	3.4 (1.9 to 6.3)	<0.0001	1.7 (0.9 to 3.3)	0.0837
Transrespect	1		1	
Religiosity				
Religious	2.4 (1.4 to 4.2)	0.0011	10.6 (4.7 to 24.1)	< 0.0001
Secular	1		1	
Seniority				
Senior	1.8 (1.1 to 3.0)	0.0139	1.5 (0.9 to 2.4)	0.1331
Resident	1			

While paediatricians working in hospitals are exposed to an academic environment characterised by openness and progress, they did not express greater comfort in dealing with transgender encounters and did not show less stigmatisation, compared with paediatricians in the community. This finding concurs with a study that concluded that the effectiveness of educational programmes may depend not only on increasing informational knowledge, but also on addressing providers' biases, and that educational initiatives should consider the backgrounds of the participants, with the aim of directly addressing prejudice and enhancing cultural humility.³⁸

While one-third of all transgender individuals who had seen a healthcare professional in the past year reported being harassed or denied care, less is known about transgender care from the physician's perspective. Among primary care clinicians and gynaecological healthcare providers, 15%–30% expressed not feeling capable of



Figure 2 Multivariate analysis of an overall unfavourable (<6) versus favourable (\geq 6) response on two domains of the Transgender Attitudes and Beliefs Scale score, according to characteristics of respondents:gender (Males vs. Females), birth country (Trans-respect vs. Trans-phobic country), religiosity (religious vs, secular) and experience (Senior physicians vs, Residents).Ex.

providing care to transgender patients.^{39 40} This is the first study among paediatricians. Discrimination by medical providers has been reported by TGNC people. In a survey of 6450 in the USA, 24% proclaimed they were denied equal treatment in doctors' offices and hospitals, and 28% reported verbal harassment in a doctor's office, emergency room or other medical setting.⁴¹ The greatest barriers to healthcare reported by transgender individuals were lack of providers who are sufficiently knowledgeable on the topic, discrimination and lack of cultural competence by providers.⁴² Due to discrimination and disrespect, 28% of adults who identified as transgender persons postponed or avoided medical treatment when they were sick or injured and 33% delayed or did not seek preventive healthcare.⁴³

Transgender children are an especially vulnerable population still subject to many barriers. Nonetheless, only a limited number of studies investigated perceived barriers to care among transgender children and adolescents. Transgender youth aged 14–22 years described judgemental and hostile clinical interactions, inadequate knowledge and the use of outdated offensive language detract providers' ability to deliver gender-affirming care.⁴⁴ While several studies investigated attitudes of care-givers such as psychiatrists,⁴⁵ perinatal care providers,⁴⁶ providers of pharmaceutical care,⁴⁷ emergency medicine residents⁴⁸ and oncologists,⁴⁹ we did not find studies assessing attitudes of paediatricians.

Paediatricians are generally the first healthcare worker to see transgender children and their parents and families. Thus, paediatricians have the opportunity to create a safe environment and to be attentive to the needs of children who seek reassurance and education regarding their gender identity. Furthermore, paediatricians are responsible for referring transgender children to puberty suppression, which was demonstrated to reduce the risk of emotional and behavioural problems and to increase functioning.⁶ A medical provider lacking the sensitivity and cultural competence to engage a transgender patient, especially a teenager, may miss signs of gender dysphoria and potentially cause harm by saying gender stereotypical things that alienate the patient further.⁵⁰ Indeed, physicians' stigma has long been established as a factor that can affect the provision of care and even reduce the intention to treat.^{51 52} The negative attitudes among paediatricians reported in the current study may affect care. However, elsewhere, such attitudes were shown to be modifiable, using antistigma programming,⁵³ as has been done with mental illness and HIV.52 54-56 Targeted contact-based interventions have demonstrated particular effectiveness.^{57 58}

This study has some limitations. We used a convenience sample, which raises the possibility of selection bias, as characteristics may have differed between those who agreed and did not agree to participate or to complete the survey. However, only 6% of those approached did not complete the survey, and only 3.5% of those who started the survey did not complete it. Moreover, we would

expect that those who completed the survey might have more positive attitudes than those who did not. The TABS questionnaire examines attitudes to 'transgender people' in general, and therefore does not necessarily reflect attitudes to transgender children. Negative beliefs may have a complex impact on behaviour, and we only assessed interpersonal comfort; this could portray an oversimplified picture. The lack of information regarding prior medical training and educational exposure of the survey participants is a limitation of this study. In addition, we studied birth country but did not assess the number of years since immigration to Israel. Nevertheless, immigrants tend to retain certain patterns of their old culture, due to a desire to preserve their former identity, if only in part, and the need for a sense of continuity. We set a high standard for favourable attitudes; our cut-off required at least 6 on a 7-point Likert scale. The strengths of this study are the large sample of paediatricians with a high response rate, the use of a previously validated instrument and analysis by characteristics of the respondents.

In summary, an overwhelming majority of paediatricians acknowledged that transgender people should be treated according to basic human values, and most felt they could interact comfortably with transgender people. Nonetheless, the majority of respondents reported negative beliefs regarding transgender people, thus indicating that stigmatisation and prejudice still exist, even among paediatricians. As physicians' attitudes can affect patient management, and in light of the great importance of proper care by paediatricians for TGNC children and youth, interventions to improve beliefs are warranted.

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ORCID iDs

Uri Hamiel http://orcid.org/0000-0001-8983-464X Orit Pinhas-Hamiel http://orcid.org/0000-0001-8365-8091

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