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Negotiating ADHD: Pragmatic medicalization and creolization in urban India

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ABSTRACT

Although a growing number of studies have demonstrated differences in responses to ADHD-like behaviours, very few studies have focused on theorizing diversity in the way ADHD is framed and approached globally. To contribute to the study of medicalization in a global context, this study examines the discursive field in which care professionals explain and treat ADHD among children in metropolitan India and addresses the need for an analytic framework to grasp the variations in the way ADHD is understood and approached. Building on the concepts of pragmatic medicalization and creolization, we study ADHD discourses in India asking 'What is at stake' and 'What matters most'?

In this mixed methods study, 64 care professionals regularly involved in assessing ADHD-like behaviour completed an online Q-sort, and 21 professionals participated in face-to-face interviews. The Q-data were subjected to factor analysis. The interviews were analyzed using qualitative content analyses.

Our study identified six distinct ADHD discourses, which showed that care professionals combine explanatory and treatment models. Professionals adapt their explanations and treatments of ADHD to parents' worries regarding academic performance, family prestige, stigma and side effects of allopathic medicine. Our findings indicate that an awareness of local concerns and adjustments to structural opportunities can diversify how ADHD-like behaviour is framed and responded to.

This study demonstrates that medicalization operates between the emerging institutions of care and the everyday concerns of families and care professionals and reveals the need to examine conflicting stakes as drivers of diverse responses to ADHD diagnosis and treatment in India and the rest of the world.

Credit author statement

Nienke Slagboom: Investigation, Formal analysis, Project administration, Writing- original draft, Jonathan Berg: Investigation, Writing- Reviewing and Editing, Christian Bröer: Supervision, Formal analysis, Writing- Reviewing and Editing.

1. Introduction

Recent studies have indicated a rise in attention deficit hyperactivity disorder (ADHD) diagnoses worldwide (Sayal et al., 2018). This study empirically examines the discursive field in which care professionals explain and treat ADHD among children in metropolitan India, one of countries where an increase in the rate of ADHD diagnoses has been reported (Kuppili et al., 2017; Sagar et al., 2020). The worldwide incidence of ADHD has been attributed to the transnational pharmaceutical industry, adoption of biologically oriented American psychiatry, classification manuals, NGO activities and large-scale programs like the Global Mental Health Action Program (Bergey et al., 2018; Conrad and Bergey, 2014) and has fueled debates on cultural validity and homogenization (Ecks, 2013; Smith, 2017; Timimi, 2005, 2010, 2010; Watters, 2010).

Recent medicalization studies, however, indicate that a widespread incidence of ADHD cannot be fully understood as a growing hegemony

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of a (Western) disease model (Timimi, 2005, 2010). Research among mental health professionals (Rafalovich, 2005) (Kovshoff et al., 2012) and children and their caretakers has shown that diversity and contestation emerge together with the spread of ADHD diagnosis (Bergey et al., 2018; Filipe, 2016; Singh, 2011, 2013b; Smith, 2017). Singh's study among children in the USA, for example, showed that ADHD is primarily perceived as a disorder of academic performance while in the UK, it is primarily seen as a disorder of anger and aggression (Singh, 2013b) (Singh, 2011). These variations were linked to differences in school systems, parenting, class-based cultures and reflected different stakes and concerns in each setting. In a recent volume on the social dimensions of ADHD in 16 countries, Bergey and colleagues showed that diagnostic criteria and medical treatment are adopted in some countries, while receiving pushbacks in others (Bergey et al., 2018). Varying approaches to ADHD in countries such as Chile, Ghana, Australia, Portugal, Italy underscored the need to refine analytical tools in medicalization research. In an Italian study, for example, Frigero refuted that ADHD practices are mere 'medical imperialism' (Frigerio and Montali, 2018). Instead, the authors emphasize power dynamics in children's daily lives and in professionals' practice. Based on subtle differences in the Australian case, Prosser and Graham (2018) argued the need for a perspective that leaves room for agency and resistance among individuals and their families (Prosser and Graham, 2018:71). Lastly, based on an illustration of paradoxical ADHD trajectories in Chili, Narravo argued that there is 'no such thing as a pure replication of a diagnosis from one place to another' (Navarro et al., 2018:327). In short, recent work has underscored the need to study ADHD as a diagnosis that is 'global and the same time extremely contextual and local' (Navarro et al., 2018:327).

While a growing body of literature is charting diversity in the way ADHD is understood, studies of ADHD and medicalization have historically focussed on the Global North and empirical research outside of Western Europe and the USA remains scarce (Béhague, 2009; Rohde and Jellinek, 2002; Wilcox et al., 2007), (Reyes et al., 2019). While Bergey et al. (2018) recent collection of case studies of ADHD has provided invaluable insights in common and different drivers of medicalization across the globe, current scholarship lacks an analytic framework for the emergence of similarities and differences in ADHD approaches within and across social contexts. Our study, then, aspires to add to empirical knowledge about medicalization of ADHD-like-behaviour in urban India and to contribute to the study of medicalization in a global context, by adding a creolization perspective (Bibeau, 1997; Glissant, 1997; Kirmayer, 2006) as an analytic tool to conceptually grasp diversity in the way ADHD is understood and approached within and between countries.

In this study we tend towards situational dynamics and local specificities in the spread of medical concepts (Williams et al., 2012) and follow up on the call that (comparative) medicalization studies should be conducted in contexts outside of 'the UK, Australia and Western Europe' (Bell and Figert, 2012). We build on transcultural psychiatry studies which showed that psychiatrists and psychologists reflexively broker Western or biomedical models and treatments. Tran (2017), for example, described that within the trend towards bio-medicalizing distress in Vietnam, professionals and patients conceptualized anxiety as either 'neurasthenia' or 'generalized anxiety disorder', depending on the patient's framing of their concern. Mianji and Kirmayer (2020) examined the continued controversy over the adoption of American psychiatric models by examining the uptake of bipolar disorder in Iran. Their study showed that in a setting where bipolar disorder is widely adopted, psychiatrists also embraced medicalization critique, for example by strongly debating the consequences of how symptoms are conceptualized.

We argue that it is useful to approach these processes of medicalization as a form of creolization (Bibeau, 1997; Glissant, 1997; Kirmayer, 2006). This better captures the process in which this divergence and convergence arises in power laden relations in local worlds, be it in the Global North or South. In doing so, we move away from studying 'local' versus 'global' perspectives, as these perspectives are themselves constructed in processes of creolization.

Here, we focus on metropolitan India and on how professionals broker the meaning of ADHD and interventions in relation to patients' concerns and limited institutional backing. We examine the discursive field in which care professionals explain and treat ADHD among children in metropolitan India.

1.1. Pragmatic medicalization and creolization

In line with (Prosser and Graham, 2018) who argued that future ADHD studies should attend to agency and resistance among individuals and their families (Prosser and Graham, 2018:71), we hold that among the many drivers of medicalization, pragmatic, everyday concerns deserve attention. Pragmatic medicalization examines how people adopt medical definitions and treatments in situationally useful ways (Lock and Kaufert, 1998). Medicalization is seen as the outcome of the dialectical relation between mental health institutions and factors that matter most in everyday life. Underlying the concept of pragmatic medicalization is the assumption that humans are inclined to solve the challenges they encounter with solutions available to them, and that concerns about health, illness and disease are not rooted in only medical establishments (Bröer and Besseling, 2017).

In this paper, we extend this approach to care professionals in urban India by attending to their concerns regarding daily routines of diagnosis and treatment and the adoption of ADHD diagnostics and treatment. In doing so, we follow anthropologist and psychiatrist Kleinman (1988), who famously argued that the study of manifestations and treatments of mental health should be done by asking 'What matters most?' and 'What is at stake?' in each context.

Building on earlier discussions on (trans)cultural psychiatry (Bibeau, 1997; Kirmayer, 2006) and globalization and medicalization (Bell and Figert, 2012; Bergey et al., 2018; Conrad and Singh, 2018; Navarro et al., 2018; Williams et al., 2012), we study the uptake of ADHD as a form of creolization. Hannerz (1987) introduced the concept of creolization in anthropology as a way to refer to the intermingling and mixing of formerly discrete traditions or cultures in locally distinctive ways (Eriksen, 2007). In its original formulation, creolization points to the emergence of new cultural forms in the context of colonialism (Kirmayer, 2006). More specifically, creolization attends to the relations of (colonial) domination, which constitute difference and its transformation at the same time (Glissant, 1997), in former colonies as much as in colonizing regions (Hall, 2015) The "local" as different from the "global" arises through domination, yet at the same time new transformations and oppositions emerge. Discrete entities emerge through contact and mixing, through processes of adaption, adoption and rejection. All cases studies in Bergey et al.'s volume (Bergey et al., 2018), we argue, demonstrate continuous transformations and "ideosyncrasies". Each version of ADHD is shown to be a temporary achievement and outcome of struggle, rather than continuous "assemblage", as Conrad and Singh (Conrad and Singh, 2018) suggested in the their reflective chapter in the volume. Similarities in how ADHD is adopted, adapted or rejected, in and outside Europe and the US, arise out of the structuring power of actors across situations.

In this study, we problematize that when studied in the Global North, ADHD is diverse and contested, but when implemented in the Global South, it is often represented as a solid "Western" phenomenon. Building on creolization theory, we take the position that the supposed existence of a global unified Western model is actually a situational accomplishment: it depends on the construction of a different and unified "local" model. Chua (2013), for example, showed how the discourse of professional psychiatrist and psychologists in South Indian public sphere mingle popular and professional registers, reaffirm structural differences, refer to Western medicine and strive for a vernacular form of their profession.

Empirically we focus on professionals' discourse in line with the arguments of Kirmayer (2006) that 'the point of the creolization metaphor is not to adopt a new essentialism but to focus on the dynamics of how mixed and hybrid identities and social practices are formed, spread and evolve'. We attend to the ways care professionals adopt, adapt or reject ADHD diagnosis and treatment in relation to pragmatic concerns among individuals and families in urban India.

1.2. ADHD in India

With the largest population of youth in the world entering the school system (Gupta, 2014), India makes an interesting setting to study medicalization of ADHD-like-behaviour in children. In 1982, the Indian government launched the National Mental Health Program (NMHP) and the District Mental Health Program (DMHP) to lower the burden of mental illness (Indian Ministry of Health & Family, 2014). Due to policies such as the NMHP and DMHP, India is considered a pioneer among low-income countries (Jain and Jadhav, 2008). Rapid urbanization, the rise of the middle class and pressure on school performance coupled with an increase in mental health services for children (Ecks and Kupfer, 2015), suggest a future increase in ADHD prevalence (Hinshaw and Scheffler, 2014). Psychiatrists in Ecks and Kupfer (2015) study in urban Kolkota highlighted the educational pressures that many children face in India. While such pressure could be expected to be a major contributor to help seeking for mental health conditions like ADHD, psychiatrists in this study reported the contrary (Ecks and Kupfer, 2015). Local contingencies might play a major role in the response to the introduction of ADHD diagnosis and treatment.

In the context of urban Bangalore, India, David (2013) showed that primary school teachers rejected the dominant causal models and pharmaceutical treatments. Instead, they explained ADHD-like behaviour as being a result of a child's unique characteristics learning difficulties or faulty child-rearing. Wilcox et al. (2007) qualitative study of parents whose children had been diagnosed with ADHD in Goa, India produced similar results. Their research reported little acceptance of the biomedical, predominantly neurophysiological explanatory model and a great deal of reluctance to consider children's difficulties as diseases. Another study among parents of children with ADHD reported high levels of nonadherence to pharmaceutical interventions (Sitholey et al., 2011). While ADHD studies are beginning to describe professionals' ambiguities in explanatory models, diagnostic practices and treatment in the Global North, to our knowledge, there are no studies focusing on care professionals in urban India. Therefore, we examine the discursive field in which care professionals explain and treat ADHD among children.

2. Research context

This fieldwork for this study was conducted in Pune, a city in the relatively economically well-off west Indian state of Maharashtra. Maharashtra reports the highest prevalence of ADHD among Indian states (Sagar et al., 2020) and has the highest concentration of health workers in India (Fan and Anand, 2016).

In Pune, services for children's mental health were always integrated within Child Development or Child Guidance Centres, paediatric units or private practices. Largely in contrast to departments providing mental health services for adults, none of the clinics explicitly advertised themselves as children's mental health services. In context, 70–80% of health care is financed privately (Khandelwal et al., 2004) and insurance is only available for the upper-middle and upper classes. More often than not, assessment and treatment for ADHD-like behaviour is financed by out-of-pocket expenditure (Khandelwal et al., 2004).

Slagboom (2014) showed that in Pune, school counsellors and paediatricians are often the first ones to see and asses children for ADHD-like behaviour. A clinical diagnosis can be granted by clinical psychologists, psychiatrists or paediatricians, using criteria from either ICD or DSM manuals (Slagboom, 2014). School counsellors' presence is mostly limited to privately run or prestigious schools that have an international curriculum (Berg, 2016). Institutes that operate under the school boards Indian Certificate of Secundary Education (ICSE) or Central Board of Secundary Education (CBSE) have made the presence of school counsellors a prerequisite (Kodad and Kazi, 2014) and have listed ADHD as a (learning) disability.

3. Materials and methods

The research protocol was reviewed by the examination committee of the graduate program Medical Anthropology and Sociology at the University of Amsterdam, Netherlands, who gave the study a statement of no objection.

Table 1
Characteristics of study respondents.

	Q-method study N = 64	Interview study N = 21
Gender		
Female	50	16
Male	14	5
Profession		
Psychiatrist	11	7
Paediatrician	10	6
Psychologist	29	6
School counsellor	12	2
Psychologist and school counsellor	2	0
City		
Pune	53	21
Mumbai	9	0
New Delhi	1	0
Bengaluru	1	0

Given the limited empirical studies on ADHD in India/discursive field of ADHD in India, a mixed-method design of Q-methodology and interviews was used to assess care professionals' perceptions of ADHD. Q-methodology combines qualitative (content analysis) and quantitative (factor analytic) approaches (Watts and Stenner, 2012). The results of the interview study were used to contextualise the findings from the Q-method study.

This study builds on data collected in Pune between 2014 and 2016. To collect as many different viewpoints as possible, the first and third author conducted face to face interviews, visited schools and care centres, attended conferences and collected secondary data sources (e.g. medical brochures and local newspaper clippings).

The interview and Q study were carried out among care professionals who regularly interact with parents and children about ADHD-like behaviour, which were psychiatrists, psychologists, paediatricians and school counsellors. Respondents were found using a snowball method and through visiting various hospitals and schools. A subset of professionals in the Q study also participated in the interview study.

3.1. The Q-method study

Q-methodology starts with the identification of the complete range of possible viewpoints (Watts and Stenner, 2012). In our study, we collected information on ways professionals and lay people explain and approach ADHD in India. These viewpoints were collected from a variety of sources, such as interviews, journal articles, notes from conference visits, medical brochures and local newspaper clippings.

Following Watts and Stenner (Watts and Stenner, 2012), we first screened these texts for clearly formulated viewpoints on ADHD (for example: "ADHD is not a mental health problem. It is a brain problem"). We identified 200 of such viewpoints, which are referred to as "statements" in Q methodology. Next, we drew a sample of statements that were broadly representative of the diverse ways ADHD is framed and approached. More specifically, the collection contained statements on the themes of help seeking, causal models, diagnosis and treatment. The selection of statements was done in a number of separate sessions in which the first and second authors individually and collectively compared different categorisations and samples. By doing so, we composed a set that contained as many viewpoints as possible, was sufficiently provocative to ensure participant engagement and in which each individual item made its own contribution to the Q-set without overlap (ibid.) We tested the remaining set of statements (Q-set) for inclusiveness with three respondents, which led to minor adjustments. This process resulted in the following Q-set of 23 statements ("S"):

1. Problems in academic performance are a common reason for parents to seek help.
2. ADHD is associated with children who feel abandoned because of working parents.
3. Behaviour modification and counselling of parents is the first choice of treatment for ADHD.
4. One should avoid labelling the child as ADHD, because it is stigmatising.
5. Pampering of children is one of the causes of ADHD.
6. Parents seek help when a child is stubborn, aggressive, fails to listen and misbehaves at home.
7. In India, drug therapy is the first choice of treatment for ADHD.
8. There is no such thing as Indian ADHD or Dutch ADHD. ADHD is universal.
9. Parents do online research and find that their child has ADHD.
10. Pharmaceutical companies are responsible for the rise of ADHD diagnosis in India.
11. ADHD is related to children who can't cope with an oppressive educational system.
12. Parents seek help for boys once school starts complaining about academic problems.
13. Instead of talking about diagnosis, you talk about the inborn qualities of the child and his personality and how these affect a situation.
14. Medicating children is an old colonial practice.
15. School's complaints of hitting, lying, steeling, truancy, anger outbursts are the reason for parents to seek help.
16. ADHD is not a mental health problem. It is a brain problem.
17. ADHD is a metabolic issue.
18. Girls are brought in once they show disciplinary problems.
19. ADHD is an adjustment problem; some children have difficulty adjusting to the outside world's demands.
20. Parents seek help when the child is not behaving properly at marriages or at a relative's home.
21. The presence of extended families is a protective factor for ADHD.
22. Our ancient Indian spirituality is a great source to treat ADHD.
23. For the uneducated class, behavioural difficulties are not much of a concern.

Respondents were asked to enter some relevant background information (profession, work experience, educational background and age) and subsequently instructed to rank statements in a pyramid grid based on the personal degree of (dis)agreement for each statement. This ranking exercise was done online or on the researchers' laptops (first and third author). Afterwards, respondents were asked to qualitatively elaborate on statements which they most strongly disagreed (−3) and most strongly agreed (+3) with, thus enabling interpretations of the various meanings provided.

The digital Q-sorts were entered into the web application for Q methodology KENQ (beta version 0.4) (Banasick, 2016), which generated a data file that could be imported into the software package PQmethod 2.35 (Schmolck, 2014) for analysis. This program was then used to inter-correlate all the Q-sorts and create a correlation matrix to give information about the relationships between any two Q-sorts. Subsequently, this matrix was subjected to a centroid factor analysis, using varimax rotation, with the aim of identifying patterns of similarity that indicate shared viewpoints. An inductive strategy (Watts and Stenner, 2012) was used to explore the Q-factors and followed the Kaiser-Guttman criterion for the number of Q-factors to extract, thus only keeping factors with an eigenvalue of >1.00.

The interpretation of the Q-factors was conducted in four sessions in which all authors participated. We looked at the typical configuration of statements for each Q-factor in combination with the qualitative elaborations on extreme statements (−3, +3) as provided high loading respondents (Watts and Stenner, 2012). Whereas the factor analysis reveals the underlying opinion structure, the factor loading indicates the association between the individual Q sort and each of the identified discourses (Appendix 1). The characteristics of the positions were analyzed, interpreted, and named by examining the typical factor array using Watts' model (2012) of the crib sheet, participants' qualitative elaborations, and demographic information.

3.2. Interview study

The face-to-face interviews were conducted in English, using a semi-structured interview schedule (first author). After participants read the information letter and signed for consent, the interviews were audio-taped and transcribed verbatim. Each interview lasted between 40 and 60 min. After noting down relevant background information (e.g. educational background, age), each interview started with the question 'for what kind of behaviour are children referred to you'? The remainder of the topic guide included questions about patient population, classification and diagnosis, explanatory models, treatment modalities and referral routes. The interview and secondary data were analyzed using qualitative and thematic content analytic approaches (Mayring, 2004). The first and second author jointly reviewed and analyzed transcripts, notes and secondary data biweekly over the course of six months.

NVIVO 11 was used as a tool to conduct these analyses.

4. Findings

Table 1 shows that 64 health professionals participated in the Q-method study, which included psychologists, school counsellors, paediatricians and psychiatrists. These professionals (referred to as "R") were aged between 24 and 63 years (mean 36 years), and on an average had been working for 9 years, with total time in practice ranging from 1 to 30 years. All participants practiced in an Indian metropole (Pune, Mumbai, New Delhi or Bangalore). Study respondents worked in state, teaching or private hospitals, schools, private practices and public health services. Twenty-one Pune-based care professionals (referred to as "N") participated in interviews and were invited to participate in the Q study. These respondents were educated at Indian universities, occasionally followed up by (post graduate) distance learning courses or working experience in the UK or US. In what follows, we first report the results of the Q-study (Table 2) followed by the analyses of emergent themes from the interviews.

4.1. Six distinct ADHD discourses

Table 2 presents the findings from the Q-study, which brought to the fore six distinct discourses regarding ADHD among care professionals.

The following section reports on the typical configuration of statements ("S") for each factor in combination with the qualitative data provided by high-loading respondents.

4.1.1. Discourse 1: blame the brain

In this discourse, ADHD is considered to be a problem of the child's brain. All other explanations for ADHD are strongly rejected in favour of 'ADHD is universal' worldwide and 'it is a brain problem' (S8 and S16:3). One psychologist (R2), for example, said, *'ADHD is a neuro-developmental disorder. It has nothing to do with the setting in which it presents. The finer details of the manifestations will vary but the core symptoms will remain the same*'. Another respondent, a psychologist (R4), stated, '*[w]here it exists in its most severe forms, I do believe ADHD is universal. Mild ADHD, however, is a matter of perspective. [It's] cultural'*. This utterance suggests that the "problem" of ADHD is embedded in a discussion about "universal" versus "cultural" aspects.

This discourse strongly refutes parent-blaming (S5: 3) and colonialism as an explanation (S14: 3). Exemplified by a paediatrician's comment (R32) that '*academic performance is a main scale on which children are gauged in the Indian society*', help-seeking is often triggered by parents concerns over academic performance (S1:2). Parents are also triggered to seek professional help if their child does not behave properly at social occasions such as marriages or visits to relatives (S20:2). While the latter statements rank high in all professional discourses, gender-specific pushes for help-seeking are emphasised here: disciplinary problems *for girls* (S18:1) and worries over academic performance *for boys* (S12:2). Different from the other five discourses, in this discourse drug therapy is considered a first choice of treatment for ADHD (S7:1) This is the only discourse which does not (strongly) support counselling parents and behavioural management for the child (S3:0).

Table 2
Six distinct ADHD discourses.

Q Factor	ADHD discourse
1	Blame the brain
2	Council the brain
3	Holistic approach
4	An adjustment problem
5	A problem of disobedience and aggression
6	A class phenomenon

4.1.2. Discourse 2: counsel the brain

In discourse 2, ADHD is also seen as a modifiable brain problem. Similar to discourse 1, the brain is seen as the sole cause of ADHD (S16:+3) and all other explanations are strongly opposed. But in contrast to discourse 1, treatment through behavioural management and counselling of parents are ranked highest (S3:+3, with a higher Z-score than S16). Even though in this perspective the brain is seen as the cause of ADHD, medicating the brain is not favoured. Again, similar to discourse 1, academic performance is frequently put forward as a problem (S1:+2) but '*complaints about hitting, lying, stealing, truancy, anger outbursts*' are even more important in this discourse (S15:+2 and higher Z-score). Different from discourse 1, 'improper' behaviour at social gatherings (S20:0) does not stand out as reason for help seeking.

Even though the statement about avoiding labelling scored only moderately positively in this discourse (S4:+1), the comments by respondents clearly bring out the need to avoid stigma. Much like other clinicians in this study, a 34-year-old psychologist (R28) avoided labelling because of '*the huge taboo of being labelled as having learning disorder/ADHD in India*'. In this vein, ADHD was discursively constructed in relation to 'Indian culture'. Another care professional (R21, school counsellor) demonstrated reflexive awareness of labelling, and ways of working around the taboo, by stating:

Once a diagnosis is concurred, it is not important to label but to find different strategies, methods, techniques of dealing with the condition and overcoming obstacles that cross their path. Labelling a child as ADHD tends to have a negative impact directly on the child. As the child grows and matures the label still sticks around in the mindset of those around him. They themselves will believe in their own label and react accordingly.

4.1.3. Discourse 3: holistic approach

In discourse 3, ADHD is defined using a holistic perspective. Counselling is strongly supported (S3:+3), while the causal model of ADHD as a brain disease is refuted (S16:+3). This discourse explicitly constructs "Indian spirituality" as a valuable source for treatment (S7:+2), in contrast to pharmaceutical treatment (S7: 2). Discourse 3 stands out for explaining ADHD as a metabolic issue and in its resistance towards labelling (S17:+1, S4:+2). Together with the rejection of the brain as the cause of ADHD, this discourse has a strong anti-biomedical tendency.

Again, similar to discourses 1 and 2, worries over academic performance and behaviour are perceived as important symptoms (S1:+3, S6, S20:+2, S15:+1). While rejecting social explanations such as 'pampering', this is the only discourse that (mildly) supports the idea of ADHD as a metabolic issue (s17:+1). The attention towards spirituality and metabolism in this discourse can be interpreted as a holistic and 'Indianized' approach of dealing with ADHD. In the qualitative elaborations of the Q-study, respondents vividly described a strong resistance to allopathic medicine among parents (S7: 2). A school counsellor (R25), for example, said:

> Medication is looked upon as an unnecessary evil which is best avoided. A majority of parents fear the irreversible effect of allopathic medication on fertility of the child during in his or her later years. Stigma related to begin on psychiatric medication is a major deterrent. Consequently, parents prefer to take the behaviour modification and counselling approach.

Respondent R25 described his own reservations towards pharmaceutical treatment:

> I do not believe that medication is the only and foremost option to manage ADHD. It is an easy option for parents and practitioners who are looking for fast results. There are many adverse side effects for children and those that can easily be avoided.

Instead of medication, this respondent named a few examples of helpful elements of spirituality (S22): '*[b]reathing exercises, soothing*

presence of elders who themselves are not in a hurry, listening to rhythmic chants, meditation'.

4.1.4. Discourse 4: an adjustment problem

In this discourse, the idea that ADHD is an 'adjustment problem' that should be discussed in terms of 'inborn qualities' scored high in survey responses (S19:+3, S13:+3). It overlaps with the previous discourse in strongly opposing drugs (S7: 3) and embracing counselling as therapy (S3:+2). It is different from discourse 3, however, in that the explanatory model of ADHD as metabolic issue are strongly rejected (S17: 3). Though society's high demands are emphasised in this discourse, an oppressive school system is opposed as a cause (S19:+3, S11: 2). Similar to the previous three discourses, behavioural difficulties at home and at school are perceived as reasons to seek help.

Different from all other discourses found in this study, help-seeking for improper behaviour in social situations (S20: 2) and the causal model of ADHD as a brain problem score low (S16: 1). This discourse resonated strongly in interviews with senior clinicians, who linked the rise of help-seeking for ADHD-like behaviour to the influence of '*the changing scenario of India*'.

These comments shed light on discussing ADHD-like behaviour in terms of a child's inborn qualities. A psychologist (R14), for example, spoke about ways in which she worked around parental concerns, including stigma, she said:

Because of the jargon terms parents get anxious. They will think 'my child is different and will never have a normal life'. Even though the doctor or counsellor may try to define what is ADHD, once the jargon is used the parents disturbed. They themselves will feel like something abnormal be in the child. They will start to be more protective. Teachers may take advantage, unconsciously, for all mistakes blame the child because he is suffering from ADHD or having ADHD.

4.1.5. Discourse 5: a problem of disobedience and aggression

In discourse 5, ADHD is perceived as a problem of aggressive conduct. Aggression and disobeying (S15:+3, S1:+3; S6:+2) rank highest as reasons to seek help, while the explanatory model of ADHD as a metabolic issue is strongly opposed (S17: 3). Similar to discourse 3, ADHD is not perceived as a brain problem (S16: 3). Medication ranks high as the preferred treatment (S7:+2) and spiritual guidance ranks low (S22: 2). We interpret this as another example of creolization in the sense that ADHD diagnosis and treatment are relationally constructed, in this case against a supposedly Indian approach (or adhering to it for that matter, as in discourse 3). Where in other discourses parent-blaming is strongly opposed, in this discourse pampering is (modestly) pointed to as a cause (S5:+1).

Where in other discourses help-seeking is solely initiated by concerns over academic performance, this discourse highlights the value placed on obedience. One psychologist (R49) commented:

In Indian families, listening to elders and respecting them are important values. If the child fails to do so on a regular basis, as in the case of ADHD, the parents realise that there is something wrong with their child and that he needs help'

ADHD diagnosis and treatment are made sense of in relation to a generalized Indian family, drawing on knowledge of what matters most in early socialization. A number of respondents shed light on how complaints about a child's disobedience might reflect badly on caretakers. One psychologist (R40), for example, commented, '*[p]arents tend to overlook issues till matters escalate. Sometimes parents feel that the behaviour of the child is due to bad parenting and are unaware that the kids need help and that help is available'*. Another respondent, a psychiatrist (R10), said, '*[w]hen they get to hear the mentioned complaints about their kids, they tend to seek help for two technical reasons. 1) To ensure their child's behavioural front, 2) To check and recheck their style of upbringing the child'*.

4.1.6. Discourse 6: a class phenomenon

Finally, discourse 6 situates ADHD in a class-culture perspective. The statements that help-seeking is pushed by 'behavioural concerns at home' while being class-related is strongly supported in this discourse (S6:+3; S23:+3). Attributing drug therapy to colonialism is strongly opposed, thereby rendering a specific version of ADHD in which labelling is also avoided (S14: 3; S4: 3). The readiness with which respondents related ADHD to class and parents' (high) educational background (S23:+3, S9:+2) differentiates this discourse from those previously described. The role of labelling is also distinct in this discourse: a readiness to grant an ADHD diagnosis goes hand in hand (S4: 3) with a readiness to explain this in terms of inborn qualities (S13:+1). Similar to discourse 5, in this discourse pharmaceutical treatment is accepted (S7:+2).

A psychiatrist (R59), for example, commented that for the uneducated parents, behavioural complaints at school do not cause much concern. Rather, parents would be reminded of their own childhood and point out the resemblance in behaviour. Clinicians occasionally referred to the role of internet in help-seeking, a well described driver for the rise of ADHD in medicalization studies (Conrad and Bergey, 2014). A psychiatrist (R57) suggested that parents in urban areas nowadays google concerns over their child's behaviour: '*ADHD is [more] commonly seen in urban populations rather than in rural'*. Others in this study described how 'tech savy' parents, or parents with a history of living abroad, would enter into their office saying '*I went online and I searched and I found that my child has ADHD'* (R8, psychologist) or '*we have diagnosed ourselves, why don't you give us this medication?'* (R23, school counsellor).

4.2. Family prestige and moral worth

The previously reported factor analysis highlighted differences in professionals' positions towards ADHD explanation, diagnosis and treatment. This section reports on commonalities among professionals' perspectives on ADHD, in both the Q-study and the interviews. According to professionals, the protection of family prestige is a core concern of parents when seeking help. A paediatrician (N27), for example, said:

> The general topic when people meet would be: 'what class is your child in?', 'what grade did he get?' or 'what school is he in?' That is kind of a prestige issue or status symbol: 'my child is going to a good English school in our area', 'he is doing well', 'he never repeated a class'. (…) I think it is almost a social stigma, not being in a good school or not passing a class and all. (…) The parents take it as a prestige or status symbol (…) The whole issue is 'how do we tell the others?', 'how do I tell my mother, my brother, how do I tell my neighbour'?

While school success is an important pragmatic concern for many parents worldwide, many participants implied that it takes on a particular shape in India. In the Q-study, professionals commonly agreed with the statement 'Problems in academic performance are a common reason for parents to seek help' (S1). Across care disciplines, respondents linked the high premium on academic success to 'a source of pride for parents' and 'a better economic future' and described academic difficulties as a 'social stigma'. One respondent (psychiatrist, N26) said: '*after bread and butter, every parent wishes for the best educational opportunities*'.

In the interviews, professionals related school failure to the moral status of children and parents in an increasingly meritocratic society. They construct a generalized Indian society in which a child who fails in school could be seen as a 'bad child', for example N32 said:

If a child fails in education, [the perception is] 'he is a failure'. Because, that is the only standard evaluation by which you can evaluate the child. If he is good in education, he is a good child. If is he is bad in education, he is a bad child. This is how it is reflected in society and the

child is treated in that way.

N32 then described failure as a family problem, which can reflect on the parents, particularly mothers:

> It is a social pressure. (…) The father is out all the day, so the mother feels like it is her duty. And if the child fails, it is her failure. (…) If a child is failing it is her responsibility totally, that she is not looking after the child. She is not doing anything. All her relatives will point out at her.

The centrality of family prestige also became visible in the way professionals contextualized worries over misconduct outside the home. While respondents often described a general tolerance for 'mischievous behaviour' in children, worries over conduct, such as hyperactivity, tantrums and aggression were also cited as a threat to the family image. Another psychologist (N19) linked help-seeking for behavioural difficulties outside the home to '*the Indian* norm *culture, in which parents are dominating and children have to follow*', which was elaborated on by saying, '*[i]f you go to a relative's house, you have to behave properly. It becomes kind of an image issue for parents: what will our relatives say when he goes to marriages and behaves like this'?*

Pragmatic concerns over prestige seemed to play out differently for boys and girls. It was repeatedly noted that boys were brought in earlier and more often than girls ('*I can hardly pinpoint two or three girls'*). This gender divide was frequently explained by referring to the way girls are socialized ('*girls learn to be more docile from a very young age*') and differences in future perspectives for boys and girls.

4.3. Negotiating ADHD

Across both the Q-study and interviews study, professionals frequently cited parents' reluctance to seek biomedical help for ADHD-like behaviour, which also emerged as a major theme in a study among parents in Goa (Wilcox et al., 2007). This was linked to fears of stigma resulting from the diagnosis and the side effects of allopathic medicine.

In the professionals' experience, parents, regardless of their socio-economic background, see a visit to a psychiatrist or psychologist's office as '*stigmatising*' or '*a sensitive issue*'. This was linked to a fear of '*being crazy*' and internal family resistance. In addition, a diagnosis might hamper (continued) access to prestigious schools, known for their strict admission processes and a demand for high grades.

In response to parents' concerns over prestige, moral worth and stigma, clinicians described several ways of dealing with classification, labelling and treatment. Respondents often distinguished diagnosing from labelling. Diagnosing referred to the classification process by the clinician ('*I would write it down in my own papers*'), while labelling was described as sharing the diagnosis with caretakers and/or referral parties. Clinicians explained this distinction with pragmatic considerations. In their view, parents '*come for a solution for their problem, not for a diagnosis*'. This way of dealing with classification was often contrasted to 'Western' approaches, which were familiar through training or through working experience abroad. In the context of India, a diagnosis, the clinicians reckoned, might drive parents away. A psychologist (N6) reflected on factors that influence diagnosis by comparing drivers for labelling in the US and India:

> We avoid labelling a child at a very young age. We tell them these behaviours are dysfunctional. Without really labelling, we tell them to work on the behaviours and if absolutely essential, we put a label or diagnosis. In India, it is different. In USA to be able to get the services, you need a diagnosis. It is not like that here. (…) Because it is private, they have to pay for it. The government does not pay. That is why diagnosis or labelling is not mandatory.

The majority of the interviewed professionals stated that they would delay diagnosing. Respondent N31 (psychologist), for example said, '*[w]e don't immediately label them after assessment, we first do one year of intervention. If the child is still not able to cope up, then we do [label them]'*.

Some professionals stated the they reframed diagnosis in a descriptive way: '*in our language, in vernacular terms*'. Others emphasised that ADHD was explained as a learning disability or a developmental disorder rather than a mental health diagnosis. Clinicians frequently indicated that rather than granting a diagnosis, a stepped-care approach would be used: counselling parents, behaviour modification for the child, prescribing a change in diets, prescribing sports or cutting down screen time. If these interventions did not prove effective over time, '*softly*' discussing the diagnosis or starting a medication trial would be considered.

In line with the 'holistic approach' discourse in the Q-study (discourse 3), professionals in the interview study frequently referred to ways in which parents' combined medical, Ayurvedic or homeopathic treatments. A number of psychiatrists noted that parents often came in with a specific request: 'no drugs'. This request was linked to the fear that drugs could be harmful. Such concerns over the side effects of

Image 1. Fieldwork pictures advertisement and packaging ayurvedic medicine to increase concentration.

methylphenidate were also present in news articles such as 'Busy Parents Put Tiny Tots on Deadly Drugs' (Mehta and Chaturvedi, 2008) and have been well described in studies on help-seeking for children's mental health in India (Sitholey et al., 2011; Tripathi and Hasan, 2014; Wilcox et al., 2007).

At the time of data collection, there was a ban for advertising prescription allopathic drugs (Ghia et al., 2014). These measures were in place for allopathic medicine under 'Schedule X', a policy that aims to prevent over-the-counter sales of these medicines and restrict the number of clinicians and pharmacists who can prescribe and distribute methylphenidate. In line with trends described in a recent review of treatment modalities for ADHD in India (Kuppili et al., 2017), psychiatrists and pediatricians also prescribed non-allopathic medicines, such as the Ayurvedic tonic, Attentio or the Omega 3 supplement, Brain Wise. During fieldwork, we found that such Ayurvedic medications targeting hyperactivity, concentration or brain development were widely available over the counter (image 1).

5. Discussion

This mixed methods study is one of the first to systematically examine the discursive field in which care professionals explain and treat ADHD in children in metropolitan India. Our Q-method study identified six distinct discourses on ADHD which testifies of diverse manifestations of ADHD in Pune/India. The interview study contextualized these findings, confirming other studies in India that found that ADHD-like behaviour is assessed amidst pragmatic concerns about scholastic performance, stigma and side effects of pharmaceutical treatment (Kuppili et al., 2017) (David, 2013; Ecks and Kupfer, 2015; Smith, 2017; Wilcox et al., 2007).

Our findings add to studies that have documented diversity in ADHD approaches within and between countries in the Global North and South (Béhague, 2009; Bergey et al., 2018; Filipe, 2016; Rohde and Jellinek, 2002; Singh, 2011, 2013a, b; Wilcox et al., 2007), (Reyes et al., 2019). With this study, we address the need for an analytic framework to conceptually grasp the variations in the way ADHD is understood and approached within and between countries. We hold that the concept of homogenization does not suffice to fully grasp diversity in medicalization and ADHD in the global context. Instead, we applied the notions of pragmatic medicalization (Lock and Kaufert, 1998) and creolization (Bibeau, 1997; Glissant, 1997; Kirmayer, 2006).

Pushbacks for diagnosis as shown in this study have also been described in other studies, for example by Reyes et al. (2019), who showed that ambivalence and subversion of medicalization enter into the ways in which ADHD is understood in Chili. By confirming the tenets of the creolization theory (Bibeau, 1997; Kirmayer, 2006), we found that definitions of ADHD and preferential treatments are differentially and reflexively adopted. In line with Filipe (Filipe, 2016:390), who studied ADHD in Portugal through the lens of science and technology studies, we found that clinical practices are selectively mobilized and that diagnosis can be understood as a situated process. Much like clinicians in the UK and Belgium (Kovshoff et al., 2012), professionals in this study spoke about weighing their clinical impressions alongside the impact of such labels for a particular child and that child's family. Practices such as delaying diagnosis, avoiding labelling and combining treatment traditions may have been instigated by the market orientation of health care and education in India. A creolization perspective can also shed light on the diversities that have been documented in earlier studies of ADHD (Bergey et al., 2018; Filipe, 2016; Reyes et al., 2019; Singh, 2011, 2013a).

This study is not without limitations. Our findings are based on professionals' reflections on everyday practice and are not based on observations of clinical encounters. The strength of our study design, however, is that it allowed for an in-depth exploration of ADHD meanings and practices, considering local stakes and pragmatic concerns. More research is needed to explore how frames on mental health, etiology and treatment reflect India's sociohistorical circumstances. Through our strict inclusion criteria, we were able to assess ADHD discourse among a cross-section of care professionals in a setting where ADHD is increasingly institutionalized. Although the participants in the study worked with families from different socioeconomic backgrounds, they were predominantly based in Maharashtra, a relatively prosperous state. Given India's stark social and economic stratification and wide local variations, this could raise questions about the generalizability of our findings beyond specific cities, such as Pune. Despite these limitations, we believe that the findings from this study could be representative of other locations and contexts characterized by growing youth populations, a steep rise in the middle class, tremendous pressure on children regarding school performance and mental health care that is not yet fully institutionalized.

6. Conclusion

This study focused on care professionals in urban India to illuminate and theorize the global spread of ADHD. We identified different positions among the clinicians and showed that professionals in metropolitan India combine explanatory and treatment models, thereby defying notions of a unified local or global culture. Taken together, our findings support the idea that medicalization operates between the institutions of health and the everyday concerns of both professionals and laypeople. Building on these premises, we suggest that local concerns are bottom-up factors in the introduction and adoption of ADHD diagnoses.

Our findings indicate that an awareness of local concerns and adjustments to structural opportunities can diversify how ADHD-like behaviour is framed and responded to.

We were able to unearth that the local variations in ADHD diagnosis and treatment are more than just a mixture of various viewpoints. They are response to globalization, constructing the local and at the same time, transcending it. Pragmatically foregrounding or hiding contested notions of illness and healing, professionals arrive at distinct approaches to ADHD.

We encourage further analyses of how local concerns are intermingled in the adoption and adaptation of diagnoses and treatment modalities of mental health diagnosis in different social contexts, in the Global North and Global. Conducting medicalization studies outside a moral realm ('diagnostic expansion is bad') can contribute to further contextualized studies of the effects of globalization, rapid social change and scholastic pressure on children's lives, in all settings.

Declaration of competing interest

None.

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Appendix 1. Descriptive statistics of six Q-factors

Factor	1	2	3	4	5	6
Distinguishing statements	1	2	2	4	2	3
(Auto)flagged sorts	5	8	8	5	5	3
Explained variance	12%	12%	14%	6%	11%	7%
Cumulative explained variance	12%	24%	38%	44%	55%	62%
Correlations between factors scores						
2	0.64					
3	0.43	0.48				
4	0.11	0.20	0.41			
5	0.40	0.44	0.37	0.20		
6	0.32	0.32	0.24	0.14	0.36	

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