Medication-Taking experiences in Attention Deficit Hyperactivity Disorder (ADHD): Systematic Review

Article Category: Systematic review

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Abstract

Background: Although Attention Deficit Hyperactivity Disorder (ADHD) is a common condition for which pharmacotherapy is considered an effective treatment, guidelines on the treatment of ADHD have been challenging to implement. Considering the views of patients and caregivers involved in medication-taking could help shed light on these challenges.

Objective: This review combines the findings of individual studies of medication-taking experiences in ADHD in order to guide clinicians to effectively share decisions about treatment.

Methods: Five databases (MEDLINE, Embase, PsycINFO, SCOPUS and CINAHL) were systematically searched for relevant published research papers. Articles were assessed for quality using a Critical Appraisal Skills Programme checklist and synthesis was performed using meta-ethnography.

Results: 31 papers were included in the final synthesis, comprising studies of caregivers, paediatric patients and adult patients across seven countries. Findings were categorised into five different constructs, including *coming to terms with ADHD*, *anticipated concerns about medication*, *experiences of the effects of medication*, *external influences* and the *development of self-management*. The synthesis demonstrates that decisions surrounding medication-taking for ADHD evolve as the child patient enters adulthood and moves towards autonomy and self-management. In all parts of this journey, decisions are shaped by a series of ‘trade-offs’, where potential benefits and harms of medication are weighed up.

Conclusions: This review offer a comprehensive insight into medication-taking experiences in ADHD. By considering the shifting locus of decision making over time and the need for individuals and families to reconcile a variety of external influences, primary care and mental health clinicians can engage in holistic conversations with their patients to share decisions effectively.

Keywords: ADHD, medications, drugs, adherence

Funding: none

Introduction

Attention Deficit Hyperactivity Disorder (ADHD) is characterized by the inability to sustain attention, modulate activity level, and moderate impulsive actions[1]. Although the resulting maladaptive behaviours are typically first recognised during childhood, symptoms often continue into adulthood[2]. Untreated ADHD has been associated with significant social and psychological sequelae[3]. Although pharmacotherapy is considered to be an effective treatment for ADHD[4], recommendations vary with regard to the use of medications as a first line treatment[5, 6].

Despite the apparent efficacy of medications and negative consequences of untreated ADHD, rates of adherence to medication regimes are low, with an estimated 50% of patients choosing to discontinue pharmacotherapy[7]. ADHD is diagnosed based on clinical symptoms with a lack of objective physical examination or laboratory investigation findings and moreover, ADHD behaviours can overlap and co-exist with other mental health conditions[1]. It has also received widespread and often contradictory media coverage in recent years[8]. As such, there are likely to be a complex array of factors that contribute to treatment decisions.

Medication adherence is a multidimensional phenomenon that is shaped by factors relating to the patient, type of treatment, condition, healthcare system and individual social circumstances[9]. Non-adherence is described as unintentional when the patient wants to adhere but is unable to due to lack of resources or capacity. Intentional adherence, meanwhile, occurs when individuals make an active choice not to comply with treatment recommendations[10]. Research in the medical and social sciences has demonstrated the importance of social support in treatment adherence[11]. In ADHD, a number of factors have been recognised including general factors such as age and gender[12] and more specific factors such as duration of treatment and the presence of side effects[13].

Shared decision-making (SDM) is a well-established approach to improving the quality of healthcare [14, 15] that involves clinicians providing information about treatment options, and patients (or caregivers) providing information about values so that agreement on the best option for an individual patient can be reached[16]. ADHD treatment guidelines recognise the importance of individual family values, concerns and preferences when deciding on treatment options[5, 6], emphasising that SDM is an essential component of ADHD care. Despite this, SDM during the treatment planning process for children newly diagnosed with ADHD has been shown to be limited[17].

There is therefore a need to support clinicians to better share decisions with ADHD patients and their caregivers.

Whilst a number of qualitative studies have explored patients' and caregivers' perspectives on ADHD medication, the clinical and policy application of their findings may be limited by the variety of study settings and populations and the relatively small individual study sample sizes. This review sought to synthesise the findings of these individual studies and was driven by the following question: *How can clinicians effectively share decisions about treatment for ADHD?*

Methods

Selection of Studies for Inclusion

We systematically searched five databases (MEDLINE, Embase, PsycINFO, SCOPUS and CINAHL) for relevant papers. These databases were chosen to maximise our ability to identify papers from both clinical and non-clinical journals. Search criteria comprised terms in three groups: methodology (search terms *qualitative; focus group; interview; ethnography* and *thematic*), focus (search terms *medication; adherence; compliance; concordance* and *drug*), and sample (search terms *ADHD; ADD* and *attention deficit hyperactivity disorder*.) These search terms were combined using Boolean logic terms (OR within the groups and AND between groups). The search was restricted to papers written in English and published in peer reviewed journals. Searches were conducted in October 2015 and were restricted to articles published since 1987, as this was the first use of the terminology attention deficit/hyperactivity disorder, appearing in the revision of the third edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-III-R) [18]. It is well recognised that qualitative studies can be hard to identify, and that systematic reviews cannot rely on database searching alone[19]. In light of this we also manually searched bibliographies.

All identified titles and abstracts were screened by one researcher (SL). In addition, ten percent were independently screened by a second researcher (MAR), with no discrepancies in selections. Studies that were excluded on the basis of abstracts alone typically did not use qualitative methodologies or did not focus on medication taking experiences. Full-text articles were obtained for all selected abstracts and assessed for inclusion by two researchers (SL and MAR). Inclusion criteria were:

1. Focuses on individuals with ADHD
2. Explores medication-taking experiences of patients and/or their caregivers
3. Uses a qualitative methodology
4. Original research paper published in English in a peer-reviewed journal

Critical Appraisal

Papers selected for inclusion were independently appraised by two authors (SL and MAR) using the Critical Appraisal Skills Programme (CASP) qualitative research checklist[20], an established tool for the appraisal of qualitative studies. Only articles scoring more than 50% were included in the synthesis.

In light of the debate surrounding the value of critical appraisal in qualitative syntheses, papers were additionally assessed with regard to their relevance to our research question, using the criteria set out by Dixon-Woods et al[21]. Papers included in our synthesis were classified as either 'Key Papers' – where content closely mirrored the topic of our research question – or 'Satisfactory Papers' – studies providing a smaller contribution to our synthesis. This classification was agreed upon by two researchers (SL and MAR) and are presented to allow readers to recognise the relative contribution of individual papers to the review

Synthesis

Included studies were synthesised using a meta-ethnographic approach. Meta-ethnography is an approach to the synthesis of qualitative studies pioneered by Noblit and Hare[22]. It can be considered as similar to meta-analysis for quantitative research in that it aims to provide a comprehensive insight into the topic of research. However, meta-ethnography differs from meta-analysis in that it seeks to interpret the results of individual studies in order to create a new conceptual understanding of the subject. It has previously been used to synthesise findings about medication-taking experiences, including in mental illness[23].

Data were extracted from the included articles in the form of *first order constructs* and *second order constructs*. First order constructs are examples of direct quotations from research participants, whilst second order constructs are the interpretations of these quotations offered by the original researchers. These definitions of first and second order constructs have been previously used in health research[24]. For each second order construct extracted from a paper, one or more first order constructs were collected in order to provide the reviewers with a clearer insight into the meanings. Tables of second order constructs were collated, which were developed by the authors into *third order constructs* – higher level interpretations of the second order constructs derived from the synthesis. Finally, these third order constructs were developed into an explanatory model of the key themes.

Results

Systematic Review

Our search identified a total of 1985 titles and abstracts for screening, of which 26 were identified via hand searching of the bibliographies of key papers, with the rest identified via database search. Full-text articles were obtained for 54 papers. After assessment, 31 articles were found to meet our inclusion criteria. Figure 1 illustrates the systematic review process using a flowchart based on the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidance[25]. Table 1 details the 31 articles selected for inclusion in the synthesis[26-56], including their demographic data. The 31 studies selected for inclusion in our synthesis comprise studies of caregivers, paediatric patients and adult patients across seven different countries.

Critical appraisal

All assessed articles scored above 50% on the CASP rating and none were therefore excluded on grounds of poor quality. On assigning relevance scores, 13 papers were assigned as key papers and the remaining 18 designated satisfactory. These results are detailed in Table 1 (key papers denoted KP, satisfactory articles denoted SAT). It was noted that some included papers were supported by pharmaceutical industry funding and this has been presented in Table 1 to demonstrate the spread.

Data Extraction and Synthesis

In total, 31 second order constructs emerged from the original papers. These are detailed in Table 2, along with the articles from which they arise. Once the second order constructs had been established by the review team, these were discussed in meetings and mapped in a series of diagrams to develop third order constructs that describe the major themes shaping patients and caregivers' experiences with medication. These are presented here and in order to more clearly describe our findings, have been used to categorise individual second order constructs:

- Coming to terms with ADHD
- Anticipated concerns about medication
- Experiences of the effects of medication
- External influences
- The development of self-management

Coming to terms with ADHD

For many caregivers, the diagnosis of ADHD was difficult to accept. Many papers noted that the decision to start medication was preceded by an acceptance of ADHD as a biological problem. Caregivers' decisions about pharmacotherapy were also shaped by their beliefs about medication. For patients, the process of coming to terms with ADHD was often reflected in how ADHD or medication impacted their sense of identity – as one college student stated: *"I don't like the idea . . . that the person I'm most like is the person who I am when I am taking medication . . . But I find more and more, that when I don't take it, I don't act as someone that I think that I am or who I'd like to be . . ."* [50] . The fear of stigma was also commonly cited as a concern, particularly for parents and early on after receiving a diagnosis. A number of papers also described medications as a last resort in ADHD, considered a reasonable option only when other measures had been exhausted.

Anticipated concerns about medication

Both patients and caregivers had concerns about the long term impact of medication. One parent stated: *"I don't know how it's [medication] going to affect him in the future? I don't know how it will affect his kids"*[39]. Anticipated concerns also included short term worries such as fears about potential side effects before commencing medication as highlighted in this quote: *"My fear is that he would kind of 'zombie out.'"*[41]. These anticipated concerns influenced decisions about whether or not to start or continue using ADHD medication. Many of these anticipated concerns were not grounded in any objective information from clinicians or scientific literature but came about from informal sources such as friends and family or the media.

External influences

Parents' decisions to commence medication were often influenced by external parties, including family and friends, and school staff – *"It was like the teachers were pushing me, pushing me. Get him meds, get him meds"*[35]. The relative importance of external influences changed during treatment as the patient matured, as illustrated in Figure 2. For children (and their parents), media was a powerful force. In both children and adolescents, school staff played an important role and for adults, higher education and employment was an important factor.

Experiences of the effects of medication

> The experience of both positive and negative effects of medication had a profound influence on patients and caregivers decisions about continuing medication. Patients and caregivers considered the balance of the benefits of medication against side effects, as well as the impact of untreated ADHD, which could equally have positive and negative domains. There were many examples of both physical and mental health effects of the medication. For some young people, the medications caused difficulties regarding their identity and also regarding control over their lives. For example one young person reported: *"Like the tablets are taking over me and I can't control myself, the tablets are in control of me."*[54]
>
> *The development of self-management*
>
> Several papers noted that the child's involvement in medication decisions increased as they matured – as one adolescent said: *"When I was younger, I didn't have a whole lot of say-so in what was going on … It was just, 'Take your medicine.' As I got older, they started talking to me more … It got better as I got older"*[36]. In addition, many papers highlighted that caregivers and patients experimented with their medication regime in order to aid decision making. This process often culminated in patients using medication selectively to help them meet the demands placed upon them. As one college student put it: "*It's good for working but . . . I don't really feel like being on it all the time I guess"*[50].

Our synthesis demonstrates that medication-taking experiences are often represented as a series of 'trade-offs'. This theme recurred either explicitly or implicitly across several papers. When making decisions about medications, patients and caregivers balanced the benefits of medication against negative consequences including side-effects, stigma, and the impact of medication on identity. The experience of medication-taking as a set of trade-offs was echoed both by patients and caregivers, and persisted throughout different age groups of patients. Often this experience was a major driver towards the development of self-management, as patients chose to take their medication in a way that best balanced their own personal set of trade-offs.

We developed an explanatory model depicting the interplay of several of the second and third order constructs in shaping the medication-taking experience. The model illustrates the evolution of external influences on decisions about medication-taking as the patient and caregivers make their journey through treatment and as the patient matures. The coloured circles in the model show how the primary decision maker changes over time. Many papers highlighted that the parent or caregiver is originally the main decision maker with regard to medication, though they are influenced by the behaviours and opinions of the child. This relationship then moves to a pattern of shared decision making between the parent and the adolescent patient, illustrated in the second circle. Finally, the now adult patient may move to a position of self-management, becoming the primary decision maker in the third circle.

This model also illustrates some of the external influences on decisions about medication, and how these influences can change over time. Several included studies dealt with the initial decision to start medication to treat ADHD. This decision was most often taken by parents/caregivers, and was often influenced by pressures from school staff, and the opinion of family and friends. Parents were also influenced by the portrayal of both medication and ADHD in the media. In the adolescent phase, during which patients and caregivers negotiate whether to continue medication, patients are influenced by the opinions of their peers, and the opinions of school staff, family and friends remain important. However, the influence of media depictions of medication or ADHD seem to lose their influence at this stage. In the adult phase, when the patient moves towards a position of self-managing their medication, the influence of varying academic or professional demands become more important. The relationship between patient, caregiver and healthcare professional plays a role at all stages.

The concept of 'trade-offs' and the explanatory model combine to give a conceptual picture of the changing experience of medication-taking in ADHD. 'Trade-offs' are largely internal experiences that remain fairly constant throughout the stages of the treatment journey, even if different constructs bore more or less influence at different times. Conversely, the model of evolving decision making represents some of the external pressures, which change more consistently as the patient matures. The model is not intended to be a summary of the third order constructs identified in our synthesis; indeed it contains a combination of both second and third order constructs. The relationships between individual second and third order constructs are outlined in table 2, which also identifies the included papers that support them. Rather, it is intended to provide a conceptual summary of the complex and evolving processes involved in making decisions about medication-taking for ADHD, as well as illustrating the elements that were consistently highlighted by participants in the included studies.

Discussion

Summary

This synthesis of qualitative studies of medication-taking in ADHD demonstrates that patients and caregivers' experiences can be broadly described by 5 main themes; *Coming to terms with ADHD*, *Anticipated concerns about medication*, *Experiences of the effects of medication*, *External influences* and the *development of self-management*. In addition, the explanatory model described above illustrates that the experience of medication-taking transforms as the patient matures and the locus of decision making shifts from caregivers to patients. The longitudinal nature of this illustration demonstrates that in order to support patients in decision making, clinicians must tailor their interventions to the appropriate stage of their disease experience.

Strengths and Limitations

One of the limitations of this work is that we chose to combine data from studies involving children, adolescents, and adults. This may have prevented us from appreciating the subtleties of the different experiences of children and adults with ADHD. However, we have attempted to overcome by this by producing a longitudinal explanatory model, allowing readers to appreciate that experiences can vary considerably with age. Whilst the explanatory model described in this paper depicts a medication-taking journey starting in childhood and continuing into adulthood, many key findings such as the role of trade-offs or the development of self-management could be relevant to patients with ADHD diagnosed and treated later in life. In addition, the majority of papers in this synthesis originated in the US, which could limit the generalisability of the findings to countries with different state health models and where drugs are less likely to be marketed directly to the public[57]. However, with evidence of increasing prescribing tendencies for ADHD in the UK[58], a thorough understanding by clinicians of patients' and carers' concerns surrounding medication-taking becomes imperative. The review team in this study included clinically trained researchers which strengthens the clinical focus to our investigation.

Implications for Research and Practice

This review demonstrates that decisions about initiating and persisting with medications for ADHD are highly complex and are affected by a variety of factors, both internal and external. These findings match the results of previous studies that have described the complexity of treatment decisions and the importance of both social, medical and treatment related factors[12, 13, 59,] . A previous review exploring non-adherence to pharmacological treatments also proposed a model to guide practitioners working with patients. It proposed three clinical actions: ensuring that patients have the right information, helping patients become motivated to commit to treatment, and assisting patients to overcome practical barriers[60]. These actions broadly fit with the model generated in this review, which contains additional, disease-specific information. The evolving nature of decision making as patients move into adulthood and the importance of educational and social functioning are particularly important features of adherence in ADHD compared to the broader adherence literature.

Clinicians involved in ADHD management should be aware of the importance of these factors, and the fact that they evolve from predominantly parental concerns in childhood, to more autonomous decisions in adolescence and adulthood. It is particularly important for clinicians to recognise that these decisions often involve compromises. It is likely that for a given patient, there will factors that both encourage and discourage them towards a choice to take medications. In the case of ADHD, this may be especially relevant because of the variation in clinical guidelines internationally. By recognising this uncertainty, clinicians can allow individuals to voice their unease and consider all available options. Similarly, the relationships between patients and their caregivers evolves with time of life, as do the external influences on the individual and family unit. Clinicians can acknowledge this shifting dynamic and recognise the autonomy of adolescent patients by including them more in treatment decisions. Furthermore, they can probe individuals and families about family, peer, school, and employer factors according to the stage of development of the patient. By voicing the influencing factors and acknowledging them in discussions, patient-clinician discussions can focus on key areas that will help to shape treatment choices.

Future research in this area might further explore the emerging family issues including sibling and parent dynamics and the types of media portrayals that influence perceptions of ADHD and its treatment. Although a proportion of papers included in this study were funded by pharmaceutical industry funding, a more detailed analysis of the effect of this funding was beyond the scope of this review and might be investigated in further studies. In addition, a clinical tool to help support decision-making could also be developed and tested, using the findings from this review.

This synthesis conceptualises the evolving experiences of using medications for ADHD. Consideration of these findings by clinicians may allow better engagement with both patients and caregivers to support shared decision making.

Funding: none

Contributions: SL, NRL and MAR were involved in study design and analysis and interpretation of data. SL and MAR drafted the manuscript and NRL critically revised it for important intellectual content. All authors approved the final version.

Declarations of Interest: NRL and MAR were supported by fellowships from the National Institute of Health Research.

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Table 1: Characteristics of Articles Included in the Meta-Ethnography

Number	Author, Year	Study Population	Sample Size	Age of ADHD patients	Recruitment Setting	Country	Methods	Relevance	Pharmaceutical Funding
1[26]	Ahmed et al., 2013	Parents	3 focus groups	Not stated	Recruitment agency	Australia	Focus groups	KP	No
2[27]	Ahmed et al., 2014	Parents	3 focus groups	Range 3-12 at diagnosis	Recruitment agency	Australia	Focus groups	SAT	No
3[28]	Avisar & Lavie-Ajayi, 2014	Adolescents	14 interviews	Range 12.5-16.5	Private practice & acquaintances	Israel	Semi-structured interviews	KP	Not stated
4[29]	Brinkman et al., 2009	Parents	12 focus groups	Range 6-17	Community paediatric clinic	USA	Focus groups	KP	Yes
5[30]	Brinkman et al., 2012	Adolescents	7 focus groups	Mean 15.1	Community paediatric clinic	USA	Focus groups	KP	Yes
6[31]	Bull & Whelan, 2006	Parents	10 interviews	Range 5-15	ADHD support group	Australia	Semi-structured interviews	SAT	Not stated
7[32]	Charach et al., 2006	Parents	3 focus groups	Range 7-15	Specialty clinic	Canada	Focus groups	KP	No
8[33]	Charach et al., 2014	Parents and Adolescents	24 interviews	Range 12-15	Specialty clinic	Canada	Semi-structured interviews	KP	No
9[34]	Cheung et al., 2015	Young Adults with ADHD	40 interviews	Range 16-23	Paediatric and child psychiatry	Hong Kong	Semi-structured interviews	SAT	Yes
10[35]	Coletti et al., 2012	Parents	5 focus groups	Mean 9.35	Child psychiatry clinic	USA	Focus groups	KP	Not stated
11[36]	Cormier, 2012	Parents	16 interviews	Range 6-11	ADHD support group	USA	Semi-structured interviews	KP	No
12[37]	Davis, 2011	Parents	28 interviews	Range 6-15	San Diego ADHD project	USA	Semi-structured interviews & survey	SAT	No
13[38]	dosReis et al., 2009	Parents	48 interviews	Mean 8.8 Range 6-16	Primary care and specialty clinics	USA	Semi-structured interviews	SAT	No
14[39]	Hansen & Hansen, 2006	Parents	10 interviews	Range 8-22	Secondary care and ADHD advocacy group	Canada	Semi-structured interviews	KP	Not stated
15[40]	Jackson & Peters, 2008	Parents	10 interviews	Range 7-18	Larger study	Not stated	Interviews	KP	Not stated
16[41]	Knipp, 2006	Adolescents	15 interviews	Not stated	High school	USA	Interviews	SAT	No

17[42]	Leggett & Hotham, 2011	Parents and Adolescents	35 interviews	Mean 11.5 Range 6-17	Paediatric clinics	Australia	Interviews and semi-structured questionnaire	SAT	No
18[43]	Leslie et al., 2007	Parents	28 interviews	Mean 9.5 Range 6-16	Primary care	USA	Semi-structured interviews	SAT	No
19[44]	Loe & Cuttino, 2011	College students	16 interviews	Mean 20.75 Range 19-22	Private liberal arts college	USA	Interviews	SAT	No
20[45]	Matheson et al., 2013	Adults with ADHD	30 interviews	Mean 34.9 Range 18-57	Outpatient clinic and ADHD charity	UK	Semi-structured interviews and survey	SAT	Yes
21[46]	Meaux et al., 2006	College students	15 interviews	Range 18-21	University	USA	Semi-structured interviews	KP	Not stated
22[47]	Mills, 2011	Parents	19 interviews	Not stated	School district	USA	Semi-structured interviews	KP	Not stated
23[48]	O'Callaghan, 2014	Adults with ADHD	18 interviews	Range 19-64	ADHD mentoring scheme and support	Not stated	Semi-structured interviews	SAT	Not stated
24[49]	Searight, 1996	Children	25 interviews	Range 5-16	Paediatric ADHD clinic	USA	Interviews and ethnographic inquiry	SAT	Not stated
25[50]	Sikirica et al., 2014	Parents and Adolescents	66 interviews	Mean 11.9 Range 6-17	Online panel	8 European countries	Semi-structured interviews	SAT	Yes
26[51]	Singh, 2003	Parents (fathers)	61 interviews	Mean 9.5 Range 6-12	Secondary care clinic	USA	Interviews using a picture-based method	SAT	Not stated
27[52]	Singh et al., 2010	Adolescents	16 interviews	Range 9-14	Secondary care	UK	Focus groups and one-one interviews	KP	No
28[53]	Taylor et al., 2007	Parents	33 interviews	Not stated	University database and ADHD support	Australia	Semi-structured interviews	SAT	No
29[54]	Travell & Visser, 2006	Parents and children	17 interviews	Range 11-16	Local education authority	UK	Semi-structured interviews	SAT	Not stated
30[55]	Walker-Noack et al., 2009	Youth aged 10-21	6 focus groups	Mean 14.3 Range 10-21	Schools	Canada	Focus groups	SAT	No
31[56]	Wong et al., 2009	Young adults aged 15-24	15 interviews	Mean 18.2 Range 15-24	Paediatric and child and adult mental	UK	In depth interviews	SAT	Not stated

Table 2: Third Order Constructs

<table>
<tr><th colspan="2"><i>Second order construct</i></th><th><i>Articles</i></th></tr>
<tr><td colspan="3">Coming to terms with ADHD</td></tr>
<tr><td colspan="2">Varying parental understanding of ADHD</td><td>2, 4, 7, 10, 11, 15, 18, 19, 22, 26, 28</td></tr>
<tr><td colspan="2">Intrinsic beliefs about medication</td><td>4, 7, 12, 13, 17, 22, 25, 26, 27, 31</td></tr>
<tr><td colspan="2">Coming to terms with the diagnosis</td><td>4, 11, 22, 28</td></tr>
<tr><td colspan="2">Fear of stigma</td><td>4, 7, 10, 11, 21, 27, 30</td></tr>
<tr><td colspan="2">Considering medication as a last resort</td><td>4, 7, 8, 10, 11, 15, 18, 22, 28</td></tr>
<tr><td colspan="3">Anticipated concerns about medication</td></tr>
<tr><td colspan="2">Fear of addiction</td><td>1, 4, 18, 25</td></tr>
<tr><td colspan="2">Concerns about long term consequences of medication</td><td>1, 2, 8, 14, 28</td></tr>
<tr><td colspan="2">Concerns about anticipated side effects</td><td>2, 4, 6, 7, 9, 11, 17, 23</td></tr>
<tr><td colspan="2">Worries about the financial cost of medication</td><td>18, 25</td></tr>
<tr><td colspan="3">External influences</td></tr>
<tr><td colspan="2">Influence of family and friends</td><td>1, 4, 7, 15, 18, 22</td></tr>
<tr><td colspan="2">Influence of the media</td><td>2, 4, 7, 15, 22, 28</td></tr>
<tr><td colspan="2">Content of information provided</td><td>2, 10, 11, 12, 31</td></tr>
<tr><td colspan="2">Relationships with health professionals</td><td>1, 4, 10, 18, 20, 21, 23, 28, 31</td></tr>
<tr><td colspan="2">Child-parent relationship</td><td>3, 5, 22, 31</td></tr>
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<tr><td colspan="2">Spousal conflicts</td><td>4, 7, 22, 28</td></tr>
<tr><td colspan="2">Experiences of misuse of ADHD medications</td><td>21</td></tr>
<tr><td colspan="3">Experiences of the effects of medication</td></tr>
<tr><td rowspan="3">Functional effects of medication</td><td>Impact on behaviour</td><td>1, 11, 14, 15, 27, 30</td></tr>
<tr><td>Impact on academic performance</td><td>1, 3, 5, 6, 8, 9, 10, 11, 14, 16, 17, 21, 23, 27, 30, 31</td></tr>
<tr><td>Impact on social skills & interpersonal relationships</td><td>1, 3, 5, 8, 10, 16, 17, 20, 21, 23</td></tr>
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	Impact on creativity	5, 23
Functional impact of untreated ADHD		1, 4, 5, 9, 10, 18, 22, 23, 24, 27, 30, 31
Experiences of actual side effects		1, 3, 6, 7, 8, 9, 14, 15, 18, 21, 24, 25, 29, 30, 31
The development of self-management		
Situational use of medication		1, 5, 10, 19, 20, 21, 25
Persistent doubts about medication use		4, 14, 22
Experimenting with medication regime		4, 5, 7, 10, 14, 21, 28, 31
Developing autonomy as an individual		3, 5, 8, 29
Making future plans for medications		14, 19, 25, 27, 31
Finding alternatives to medications		19, 20
Consideration of trade-offs		3, 5, 7, 8, 11, 12, 14, 16, 19, 20, 21, 28