

Exploring variation in clinicians' perception and approach towards adults with ADHD

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Abstract

There are various views towards Attention Deficit Hyperactivity Disorder (ADHD) and the recent introduction of the disorder for adults has added to the controversies. I intend to explore variation in clinicians' perception and approach towards adults with ADHD. I produced a vignette describing an adult with a diagnosis of ADHD and sent it to 150 clinicians. I received 44 replies, and performed 16 semi-structured interviews. I found participants suggested various diagnoses, causes of the problem, treatments, and the appropriate professional group for the vignette. Participants confirmed the existence of variation in the clinicians' perception and approach. Their views also suggested that the different characteristics of clinicians, diagnostic methods, psychiatric disorders, the possibility of access to different information and social factors were contributing to the variation. In addition, my analysis indicated that participants might have different perceptions according to their experience, awareness and work-settings. I found that the variation might be also related to the inclination of participants towards particular disorders or styles of practice, and hermeneutical factors. Finally, I produced a model that illustrates a relationship between different factors with the variations in clinicians' perception and approach. In conclusion, I suggested the dependency of diagnosis on clinicians, the possibility of a variation in their knowledge, and gaps between research and practice. I described different types of competition that exist in the process of the medicalization of ADHD. Finally, I discussed directions for future investigations.

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ABBREVIATIONS

ADHD	Attention Deficit Hyperactivity Disorder
BMD	Bipolar Mood Disorder
CHADD	Children and Adults with Attention-Deficit/Hyperactivity Disorder
DSM	Diagnostic and statistical manual of mental disorders
DSM-II	DSM, second edition
DSM-III-R	DSM-III, revised
DSM-IV-TR	DSM-IV - text revision
GP	General practitioner
ICD-10	The International Classification of Mental and Behavioural Disorders, 10th revision.
MBD	Minimal Brain Dysfunction / Damage
NHS	National Health Service
NICE	The National Institute for Health and Clinical Excellence
PCT	Primary Care Trust
UC	Utah Criteria

Chapter 1 : Introduction

1.1 Rationale and scope of the research

In this study, I explore the variation that exists in the perception and approach of clinicians. Therefore, in order to clarify my motivation towards undertaking this study, I have to explain why I have selected variation in clinicians' perception and approach, and why I have chosen adult ADHD as a case for this.

Initially, I should note that my previous education informs my understanding of medical and psychiatric decision-making. Throughout this dissertation, I refer to my experiences in medical settings. Four years of theoretical medical studies and four years of practical learning and presence in hospitals and clinics as a medical student and practitioner back up my understandings, and so worked as an 'unintentional' ethnography study.

I came across 'variation' in the perception and approach of clinicians throughout my ordinary and professional life, but a series of events led me to take it as an important question for this research. I lived for thirty years in Iran, where visiting a general practitioner or a consultant is quite affordable, so people could freely select a clinician themselves and it might even be possible to ask the advice of different clinicians on the same day. Actually, it is a common phenomenon that people ask the advice of another clinician where

the previous treatment has not been successful or even if they are not happy with a suggested treatment. Therefore, receiving different opinions for the same problem is frequently observed.

In my experience, variation in the perception and approach of clinicians towards medical problems with biological origins can be easily understood. On those occasions frequently one person is 'right' and the others 'wrong'. For example, during my medical education, I recall an occasion in which different physicians were disputing an abnormality in the X-ray of a patient, and finally a surgeon ended the controversies by reporting his direct observation of the abnormality. However, this could not happen for mental disorders. When I was among the first doctors who were 'aware' of adult ADHD in Iran, as I will explain later, I was faced with serious disagreements for which I could not find an easy solution. I was a general practitioner and in Iran at the time, only consultants could prescribe ADHD-related drugs. Therefore, I had to refer my clients to psychiatrists, who did not agree with my diagnosis of ADHD and suggested other disorders such as bipolar disorder. Although I could not find a way, similar to biological situations, to end the disputes, I still had a simple explanation for the situation: I believed the disagreement was caused by the 'unawareness' of others.

When I started my PhD research, initially I had not considered variation as my research aim. I was interested in the sociological exploration of ADHD and found that ADHD has been sociologically investigated through 'medicalization theory'. However, I noticed the fact, and became surprised by it, that some

sociologists viewed differently to some aspects of the medical model of ADHD. Coming from a positivist background, I could not explain how people from different 'scientific' disciplines could have different views on the same issue. I will discuss the importance of those epistemological positions in the next section. However, I still used, with difficulty, the explanation of 'unawareness' for this situation. Meanwhile, I came across a book¹, which described addictive disorders such as workaholism, alcoholism and sex addiction. In the book, a number of people were introduced that had a biological predisposition to addictions and who may move from one addiction to another. I read the explanations and diagnostic guidelines that were introduced in the book for such 'patients' and found that the descriptions had considerable overlaps with the one for ADHD. I could imagine that one of those people could be diagnosed with ADHD or behavioural addictions, not as two co-existing problems, but as two different explanations for the 'same' condition. This potential variation was between authors from the same discipline, which I could not easily justify and explain it simply by lack of awareness. I started to think back more critically to my previous observations and considered variation as a much more fundamental phenomenon that could have different underlying causes. Therefore, I became interested in this phenomenon and decided to undertake my PhD research on this subject. In the following paragraphs, I will explain why I have chosen ADHD as a case for my investigation.

¹ Coombs, Robert Holman (editor), 2004 ,Handbook of Addictive Disorders, a practical guide to diagnosis and treatment. New Jersey, John Wiley & Sons.

I learned about ADHD while I studied medicine in Iran (1992-2000). At first ADHD was taught as a childhood disorder. However, I found a new version of a psychiatric textbook² that introduced ADHD for adults as well. The characteristics of an ADHD patient sounded very familiar to me and enabled me to find an explanation and to generate hope for some people that I knew. I became interested in the topic and contacted the author of the new section, Professor Paul H. Wender. He introduced me to his book³ and, for the first time in Iran, I obtained it and published my Farsi translation of it. I also undertook my medical doctoral dissertation on normalizing a diagnostic tool, which was introduced in the book⁴. During the next couple of years, I performed two review studies on ADHD in adults, which were published in the formal journal of Iran's Ministry of Health. In the first study⁵, I explored the relationships between ADHD in adults and various social and legal problems. I reported that according to reviewed evidence, ADHD seems to be highly related to issues such as substance addiction including alcohol and cigarettes, professional and academic difficulties, crime, and driving accidents. These sources showed that the diagnosis and treatment of ADHD could prevent and

² Benjamin J. Sadock, Virginia A. Sadock, 2000, Kaplan and Sadock's Concise Textbook of Clinical Psychiatry, Lippincott Williams and Wilkins, Philadelphia.

³ Wender, Paul H., 1995, Attention deficit hyperactivity disorder in adults. Oxford University Press, New York.

⁴ Title of my MD thesis: Normalizing and evaluating the validity and reliability of the Wender Utah Rating Scale to diagnose ADHD in adults in Isfahan, 1999-2000

⁵ SARRAMI-FOROUSHANI, P. & GHOMASHCHI, F. (2003) article in Farsi: A survey on the relationship between attention deficit hyperactivity disorder (ADHD) and socio-legal problems. *Tebotazkie (The medicine and the morality)*, 49, 45-55.

treat the above-mentioned problems. In the second study⁶, I recognized ADHD as a common source of academic problems in university students, which is manageable, but is usually overlooked. In both reviews, ADHD emerged as an important topic that merits further study.

After the events that I explained above, I gained experience, knowledge and interest in adult ADHD, and decided to select it as a case for my investigation on variation in clinicians' perception and approach. In addition, as I will explain in the next chapter, because of the controversies that surround adult ADHD, I considered it is a good case for my investigation.

1.2 Underlying epistemological assumptions

In the previous section, I referred to my background in medicine and my initial positivist approach to psychiatric disorders. In this section, I will explain my journey in adopting a different epistemological position.

Holding a positivist approach implied that I viewed ADHD as a biological reality out-there and the diagnosis process as discovery of that reality in patients. However, positivism and medical naturalism have been criticised for overlooking related social/political issues, and its failure in providing explanation for some phenomena (Pilgrim, 2008).

In addition, when I considered a sociological investigation, I focused on the related social structures. Social structures have some characteristics that do not exist in a natural structure: social structures are

⁶ SARRAMI-FOROUSHANI, P. (2004) ADHD: article in Farsi: A common undiagnosed cause of learning disabilities and behavioural problems in university students. *Tebotazkie (The medicine and the morality)*, 51, 25-31.

activity-dependent and can exist as long as agents have activity; they are concept-dependent and depend to the beliefs of the agents, so they might be reproduced; and social structures are space-time dependent and are not permanent (Benton and Craib, 2001, p133). Therefore, positivism had obvious limitations for my study and for a full understanding of the phenomenon that is ADHD.

In the next step, in order to investigate ADHD related social structures, initially I intended to use social constructionism. The term of social constructionism, although has been used with a wide range of meanings (Scott and Marshall, 2005, p 607), implies that: “all knowledge, including scientifically obtained knowledge, is a construct of culture, language and social roles and has no claim to final truth” (Reber et al., 2009, p 748). This approach is critical of positivist sciences and implies that all claims about a reality are due to relationships and are relative, so it is impossible to accept one reality as better than another (Gergen, 2001). Some aspects of this approach were relevant to my research: I could evaluate the constructed meaning of ADHD for clinicians; and construction of meanings suggests existence of variation in perceptions, which I will discuss further in section 2.3.2 (The philosophical theory of knowledge).

However, I intended to undertake an interdisciplinary study between psychiatry and sociology; and I was concerned that reliance on radical constructionism could make the results of the research incompatible with medical paradigm. Radical constructionism may deny existence of mental disorders such as depression as a reality and consider them just as a social construction (Pilgrim, 2008). That could be one of the main reasons that sociology could have different positions towards mental disorders, comparing with medicine:

“The medical approach argues that such distress reflects an underlying illness which merits treatment. The sociological perspective argues that it is the consequence of a failure to respond adaptively to social challenge. The

former focus on diagnosis and the provision of treatment, the latter on understanding and clarifying patients' dilemmas."(Middleton and Shaw, 2000, p 1420)

Such situation could make it difficult to produce compromising results for both medicine and sociology, as Dingwall suggested:

"...the need for sociologist to be more critical of the positivist version of disease that was, and still largely is, hegemonic among our medical colleagues, and to insist that constructionist accounts cannot disregard the materiality of the human body and disturbances to which its biology is subjected. Medical sociology remains pressed from each side" (Dingwall, 2001, p vii).

Therefore, I finally adopted a critical realist approach, which is anti-positivism, but is 'realist' (Benton and Craib, 2001, p119). Realism in this context means "clear recognition of existence of an external world, independence of, and often defying, our desires of it" (ibid, p120). In critical realism, recognition of reality comes with a weak version of constructionism, which implies that the way we understand and describe reality is socially constructed (Pilgrim, 2008). Therefore, critical realism maintains that:

"There is an objectively, potentially knowable, independent reality, but at the same time acknowledges the constructive roles of context, perception and cognition."(Middleton and Shaw, 2007, p 293)

This approach keeps us cautious about possible misunderstandings. In this way, although we are always trying to gain the best possible knowledge, we never consider our knowledge as the ultimate truth and we will be open-minded for any change that might happen in our beliefs. Critical realism is useful for an interdisciplinary field (Benton and Craib, 2001, Rogers and Pilgrim, 2005), and facilitate acknowledgement of different perspectives that could exist towards psychiatry (Middleton, 2007, Middleton and Shaw, 2007, Middleton, 2008). Therefore, as my research is a joint point for psychiatry and sociology, I found critical realism to be a proper epistemological position for my study. In addition, as I will discuss in section 2.3.2, critical realism indicates existence of clinical variation.

1. 3 Structure of the dissertation

Six chapters follow this introductory chapter:

Chapter 2, *Overview of the main concepts*, presents an introduction on ADHD and different views that exist around it and discusses the main controversial elements. It also introduces the concept of variation in clinicians' perception and approach, and explores its importance, and finally the chapter ends with the introduction of research questions.

Chapter 3, *Designing the research method*, explains all stages of my research, including research design, data collection and data analysis and clarifies why I have chosen the method that I have done, what theoretical and practical

factors have influenced the course of my decision makings, what difficulties I faced and how I managed my research.

Chapter 4, *Observed variations in participants' responses*, discusses the data that I have collected through the questionnaires and identify variations in the data. The chapter introduces suggested diagnoses, causes of the problem, treatments, and the appropriate professional group responsible for treatment of the vignette, and also the categorization of the participants based on their general perception and approach towards the vignette.

Chapter 5, *Subjective accounts of the participants*, illustrates how the participants themselves perceived such variation in clinicians' perception and approach, and reviews personal accounts of participants on the acceptability of the variation. In addition, it introduces factors that participants suggested as underlying reasons of the variation such as different characteristics of clinicians, diagnostic methods, psychiatric disorders and social factors, and the possibility of access to different information during patient-client interactions.

Chapter 6, *Exploring variation*, provides details of my analysis of underlying causes of the variation, which includes investigating the roles of experience, awareness, work-settings; the inclination of participants towards particular disorders or styles of practice, the role of hermeneutics in variation. Finally, it

illustrates a produced a model on the relationship between social, personal factors and hermeneutics with the variations.

Chapter 7, *Conclusions*, considers contributions of the study to the field of medical sociology, and its theoretical and practical implications. There are discussions on dependency of diagnosis upon clinicians, different types of competition that exist in the process of the medicalization of ADHD, the possibility of a variation in the knowledge of clinicians, gaps between research and practice and the considerable difference that an objective diagnostic method could make to the variation in psychiatric diagnosis. The chapter ends with directions for further studies.

Chapter 2 : Overview of the main concepts

In this chapter, I will begin by introducing ADHD and then talk about the different views that exist of it. I will critically explore each view, and then I will discuss the main controversial elements. Those discussions will highlight many important issues in the diagnosis and treatment of psychiatric disorders, which are represented for the case of ADHD in this study. Then in the next section, I will introduce the concept of variation in the clinicians' perception and approach. Finally, I will introduce my research questions.

2.1 Introducing ADHD

2.1.1 History

The phenomenon that is called ADHD existed even before the introduction of the medical label. Wender (2000, p 3) refers to “fidgety Phil”, a German nursery rhyme, which describes a hyperactive child in 1863. The history that is mentioned here is related to the ‘label’ and the recognition and definition of the condition as a mental disorder.

Health care professionals have described ADHD in children since 1902 (Mayes and Rafalovich, 2007). Definitions and diagnostic criteria of ADHD have changed along with other psychiatric disorders in guidelines such as

DSM⁷. In 1968, DSM-II⁸ devoted one paragraph to describe 'hyperkinetic reaction'. At this time various designations were used for the condition including: 'minimal brain damage', 'minimal brain dysfunction', 'minimal cerebral dysfunction', 'hyperkinesis', and 'hyperactive child syndrome' (Wender, 1995, p 4). However, in 1980, DSM-III replaced the different names and labels with the label of 'attention deficit disorder (ADD)' and extensively described diagnostic criteria for this condition (Mayes and Erkulwater, 2008, Wender, 1995). The label and related criteria were modified by DSM-III-R⁹ and DSM-IV in 1987 and 1994, respectively. According to DSM III, IV, and DSM-IV-TR¹⁰, it is possible to suggest the diagnosis for adults, as the guidelines mention 'work' adjacent to 'school', but the criteria mainly describe children (Wender, 2000, American Psychiatric Association, 2000, Conrad, 2007).

Expansion of the concept to adults has provoked different reactions in researchers. Wender (1995) refers to the difficulties and limitations of conducting research on children, and therefore referred to ADHD in adults as an opportunity for undertaking more studies and obtaining more knowledge of ADHD. Conrad and Potter (2000) were also interested in the emergence of ADHD in adults as an example of expansion of diagnostic categories in the process of medicalization. In any case, adult ADHD presents itself as a new and important area for research and investigation.

⁷ Diagnostic and statistical manual of mental disorders

⁸ DSM, second edition

⁹ DSM-III, revised

¹⁰ DSM-IV - text revision

Different authors have presented different perspectives in relation to the history of ADHD. In psychiatric investigations, authors focus on the development of relevant diagnostic criteria (Wender, 1995, Wender et al., 2001). In contrast, medical sociologists consider related social factors (Conrad, 1975, Conrad, 2006, Conrad and Potter, 2000), for example indicate the role of amphetamine's discovery in the introduction of ADHD as a disorder. In addition, identifying contributing social factors in the breakthrough of ADHD, they refer to the sudden increase in the production rate of the pharmaceutical industry, a general increase in the application of medications in mental health, and confirmation from the US-government (ibid).

From both medical and sociological perspectives, the authors reported the existence of different accounts, names and definitions for the phenomenon both in different times and in each time section. Wender (1995, p 4) stated:

“The concepts behind, the criteria for, and the names of the syndrome of Attention-deficit Hyperactivity Disorder have changed frequently”.

Conrad and Schneider (1992, p 155) also suggested:

“Although the literature attempts to differentiate MBD, hyperkinesis, hyperactive syndrome, and several other diagnostic labels, it is our belief that

in practice they are almost interchangeable - especially in terms of treatment.”

This implies that at the time, there has been a variation in the perceptions of health care professionals towards the same phenomenon, which was managed by introducing a substituting label. However, in the next section I will discuss different views of ADHD that indicate a continuation of variation in people’s perception of the phenomenon.

2.1.2 The Importance of ADHD

ADHD is introduced as a prevalent, extensively studied and highly controversial mental disorder (Wolraich, 1999, Skounti et al., 2007). Treatment of ADHD, either via psychological treatments or by pharmacological means, imposes considerable financial burdens on the health care system. It was estimated in 2000, if all 6 to 16 year old patients with ADHD in England and Wales, who were not receiving medication at the time, were about to start drug therapy, the total cost would be approximately 45 million pounds in the first year (Lord and Paisley, 2000).

2.2 Different views toward ADHD

Different opinions of ADHD have their own advocates who support their favourite idea in a variety of ways including publishing materials, granting money, and even performing legal actions (Charatan, 2000). In the following sections, I have divided different viewpoints into medical, anti-psychiatric, and sociological views and will introduce and critically explore each perspective.

2.2.1 Medical view

As I will explain in the following sections, a medical model of ADHD implies that it is a valid disorder, caused mainly by genetic-biological factors and it is possible to correctly diagnose and successfully manage it. I will explain the medical view of ADHD, according to the available ideas on its causation and diagnostic and treatment methods. Although I have extensively reviewed various sources, I have based this introduction of the medical view mainly on the book of Prof. Wender that I introduced in the first chapter¹¹. I have selected that book as it was one of the first titles on adult ADHD, which explored various studies of causation, prevalence, diagnosis and treatment of ADHD in adults.

¹¹ Wender, Paul H., 1995, Attention deficit hyperactivity disorder in adults. Oxford University Press, New York.

Medical perspective on causation

The exact cause of ADHD (aetiology), like many other psychiatric conditions, is not precisely known (Sadock and Sadock, 2009). Many researchers have explored a range of factors for the causation of ADHD, such as environmental influences (Max et al., 2005, Fahlke and Hansen, 1999), diet problems (Mattes and Gittelman, 1981, Cawte, 1985), or psychosocial factors (Vasconcelos et al., 2005), however, the majority of studies suggest genetic neurological origins for it (Faraone et al., 2005, Waldman and Gizer, 2006).

Early ideas of the genetic transmission of ADHD were rooted in the observation of children and their biological parents compared to non-biological parents (Wender, 1995). Genetic studies of ADHD scientifically attempt to distinguish between 'nature and nurture' effects and involve different strategies including 'family studies', 'twin studies' and 'adoption studies' (ibid, p 82), which imply that genetics could have a role in the transmission of ADHD (ibid).

The main underlying cause of ADHD has been suggested to be reduced catecholaminergic¹² activity (Wender, 1995, Nieuoullon, 2002). Those conclusions are based on indirect observations. For example, a viral infection¹³, which affected related parts of the brain, caused similar symptoms; or drugs, which increased catecholaminergic activities, reduced the symptoms in humans and animal models (Russell et al., 2005, Wender, 1995).

¹² Related to neurotransmitters, mainly dopamine

¹³ Von Economo's encephalitis

The variation that exists in the symptoms of ADHD patients makes the study of causes of ADHD difficult. On the one hand, in order to validly classify heterogeneous patients into subgroups, it is necessary to know the exact cause of the condition; and on the other hand, in order to investigate the cause, it is necessary to have homogenous groups of patients (Wender, 1995). Wender, explaining this condition, provides the example of pneumonia:

“If a clinician studies “the” infectious disease pneumonia but cannot distinguish between viral pneumonia, pneumococcal pneumonia, and pulmonary tuberculosis, he is going to have a difficult time finding the exact “cause”.” (ibid, p 77)

Biological studies of the causes of ADHD includes attempts to measure materials in body fluids, exploring responses of patients to specific drugs, and utilizing imaging techniques (Wender, 1995). These studies suggest that ADHD has various causes and is ‘etiologically heterogeneous’; it is accompanied by some items such as alcoholism more frequently than could be explained by chance and it is associated with a decrease in dopaminergic activity (ibid, p 120).

Diagnosis in the medical model

Although ADHD, like many other psychiatric disorders, is believed to have organic causes, like almost all psychiatric disorders and psychological problems, its diagnosis is not via a biological test and is based on information

that clinicians obtain through the patient or others. Lack of success in developing a biological diagnostic method for ADHD is justified by the complexity of the nervous system. Wender (1995) referred to the complication of the blood coagulation system and asked:

“Do we suspect that the mechanisms that oversee the sensitivity and reactivity of the brain are less complex?”(p 114)

Therefore, while attempts towards achieving a practical biological test have not been successful, health care professionals have explored many different ways of diagnosing ADHD, such as different rating scales (Collett et al., 2003), diagnostic tools (Dige and Wik, 2005, Boutros et al., 2005, Siklos and Kerns, 2004), computer based tests (Manor et al., 1999, Klee and Garfinkel, 1983, Yasuhara et al., 2003); and criteria for diagnostic interviews (Schwab-Stone et al., 1993).

The formal, and most approved, diagnostic guidelines for diagnosing ADHD are presented in DSM-IV-TR (American Psychiatric Association, 2000) and ICD-10¹⁴ (World Health Organization, 1992). For example, the guidelines published by NICE¹⁵ are mainly based on DSM and ICD (NICE, 2006a, NICE, 2006b, NICE, 2008b). DSM considers the possibility of the continuation of

¹⁴ The International Classification of Mental and Behavioural Disorders, 10th revision.

¹⁵ The National Institute for Health and Clinical Excellence

symptoms into adulthood; however, it provides examples and descriptions that are mainly suitable for children (Wender, 2000, American Psychiatric Association, 2000, Conrad, 2007). In the ICD-10, the condition is named 'hyperkinetic disorders', and is introduced as 'behavioural and emotional disorders with onset usually occurring in childhood and adolescence' (World Health Organization, 1992, p 260). NICE initially introduced ADHD only for children (Lord and Paisley, 2000), but recently it has considered ADHD for adults as well (NICE, 2006a, NICE, 2008b). Utah Criteria (UC) were developed at the University of Utah Medical centre, to diagnose ADHD in adults who had not received a childhood diagnosis of ADHD, and provides specific descriptions of adults with ADHD (Wender, 1995, p 123)(see Appendix A).

Symptoms of ADHD overlap with symptoms of many other conditions (Kessler et al., 2006, Vlam, 2006) and ADHD could be related to many other psychological and psychiatric impairments in 'cognitive, language, adaptive functioning, motor development, emotion, school and task performance, and medical/health risks' (Barkley, 2003, p 81).

Diagnostic protocols of ADHD attempt to help practitioners to differentiate between similar conditions. While describing the criteria for diagnosing ADHD, DSM-IV-TR states that:

"The symptoms do not occur exclusively during the course of a pervasive developmental disorder, schizophrenia, or other psychotic disorder and are not better accounted for by another mental disorder (e.g., mood disorder,

anxiety disorder, dissociative disorder, or personality disorder)(American Psychiatric Association, 2000, p 93).”

Treatment in the medical model

Researchers have tried to treat ADHD with different methods including stimulant drugs (Gualtieri et al., 1984), antidepressant drugs (Maidment, 2003), psychological interventions (Shah et al., 2005), homeopathy (Frei and Thurneysen, 2001), and diet modifications (Marcason, 2005, Kavale and Forness, 1983).

Although treatment of ADHD is suggested to be a combination of medical and psychological treatments, psychostimulants are perceived to be the most important part of the treatment (Wender, 1995, Peterson et al., 2008). Drugs that are used for the treatment of ADHD include methylphenidate (Ritalin, Concerta), dextroamphetamine and Atomoxetine (Stratera) (Sadock and Sadock, 2009, p 85). Confirming the importance of drug therapy, Asherson et al suggested:

“Stimulants and Atomoxetine effectively reduce ADHD symptoms at all ages and should be a standard treatment in general adult psychiatry practice” (2007, p 4).

Similarly, Wender confirmed:

“Although the efficacy of medication has been documented, the usefulness of psychosocial treatment, counselling, support groups, and couple treatment remains to be explored. My impression is that psychological therapies are of limited benefit unless drug treatment is effective.” (1995, p 196)

Therefore, drug therapy with stimulants is an important part of the medical model of ADHD.

Prevalence according to the medical model

ADHD is considered to be a common condition (Singh, 2008, Remschmidt, 2005). However, there is a discrepancy in reported rates for prevalence of ADHD and has been estimated between 2.2% and 17.8% (Skounti et al., 2007, Singh, 2008). Those controversies are attributed to differences in the employed diagnostic methods (Rowland et al., 2002, Wender, 1995, Faraone et al., 2003).

Nevertheless, in the past decades, despite uncertainties towards ADHD (Janos, 1978, Dube, 1993, Perring, 1997, Jensen, 2000, Timimi and Taylor, 2004), rates of both diagnosis and treatment of ADHD in the UK and many other countries have increased considerably (Robison et al., 1999, Faraone et

al., 2003, Singh, 2008). Mayes and Erkulwater (2008) refer to a number of factors that could have contributed to this increase, such as changes in diagnostic criteria, activity of organizations like CHADD¹⁶, and an increase in clinicians who could diagnose the condition.

The prevalence of ADHD in children in the UK has been significantly lower than in the USA (0.5-1 % vs. 3-9 %); however, the rate of diagnosis and treatment is rapidly growing in both countries (Holowenko and Pashute, 2000). ADHD is identified in about 1% of children in the UK, (mainly boys, M/F : 12/1) and it is normally identified at the age of 8, by school nurses or general practitioners (Parr et al., 2003). NICE has considered different rates according to the sex and age, ranging from 0.43% (women aged 18 years and older) to 3.62% (boys aged 13 to 15 years old) (NICE, 2008a).

Critical views of the medical model of ADHD

Controversies around ADHD

Some qualities of ADHD in the medical model facilitate controversies around it (Singh, 2008). I have summarized those qualities in the following points (Sarrami-Foroushani, 2008):

1. Identification of this disorder has led to drug treatment of millions of children around the world;

¹⁶ Children and Adults with Attention-Deficit/Hyperactivity Disorder

2. Diagnosis and treatment of this disorder, especially in children, is demanded by others such as parents and teachers;
3. The disorder does not have an actual start and end; its signs and symptoms¹⁷ are with the patient for his/her life;
4. The signs and symptoms could be found in everybody and it is only the 'quantity' of signs and symptoms that make the difference between patients and normal people;
5. Treatment of the disorder is biological, and it is claimed that the disorder has a biological basis even though no practical biological diagnosis method has yet been established; distinguish
6. Stimulant drugs are considered safe and are widely prescribed for children; however, their distribution is highly controlled and they are classified as schedule II drugs (i.e. drugs that potentially could be abused);
7. Stimulant drugs do not cure the situation and are merely symptomatic treatment;
8. Depending on the social and environmental situation, signs and symptoms of the disorder might become an advantage for patients;
9. Depending on the social and environmental situation, signs and symptoms of the disorder might decrease and even disappear.

¹⁷In psychiatry, it is difficult to make a distinction between signs and symptoms in contrast with medicine; therefore, I have used those terms together throughout this thesis as 'signs and symptoms'.

Above points indicate that ADHD is a good case for exploring controversies in psychiatric diagnosis and management. Because of those points lay people and even some health care professionals might disagree with the medical model of ADHD. For this reason, Kewley (1998) was concerned about the 'underdiagnosis' and 'undertreatment' of ADHD in UK:

"Attention deficit hyperactivity disorder is a condition of brain dysfunction that is misunderstood and under-recognised in Britain. Research shows that it is a genetic, inherited condition that can be effectively managed. Studies of twins suggest an exceptionally high concordance, and genetic studies show a likely polygenetic basis for inheritance. Evidence of brain dysfunction has been found in cerebral imaging studies, including functional magnetic resonance imaging, quantitative electroencephalography, and positron emission tomography. If untreated the disorder may interfere with educational and social development and predispose to psychiatric and other difficulties. There is much myth and misinformation, fuelled by personal bias and the media, surrounding the existence and treatment of the condition, which has led to an assumption that it is overdiagnosed and overtreated in Britain." (p 1594)

It is notable that in the above argument, Kewley referred to evidence of genetic transmission of ADHD and imaging studies, in support of a medical

model of ADHD and it being a brain 'dysfunction'. Initially it might seem a complex logic, as any 'characteristics' of human beings could have genetic origin, as genetic transmission is not limited to the 'disorders'. In addition, imaging studies indicate a 'difference' between ADHD patients and controls, which is not necessarily a 'dysfunction'. However, it is remarkable that according to Kewley there are people who ignore the 'biological basis' of ADHD and believe it is caused only by "poor parental discipline" (ibid, p 1594). For this reason, it has become necessary for him to argue that ADHD patients are biologically and genetically different from others. In addition, Kewley has also referred to the ignorance of the beneficial effects of drugs and 'unfounded' concerns in this regard (ibid, p 1594). I will explore these concerns in more details in the section 2.2.2 on anti-psychiatry view.

Discussion on signs and symptoms in ADHD

Signs and symptoms of ADHD, unlike some other psychiatric conditions such as 'schizophrenia', are not 'bizarre' in quality; the same symptoms -although less noticeably- could be found in everybody. Therefore a diagnosis of ADHD is a matter of quantity, not quality (Wender, 1995).

In addition, like some other psychiatric conditions, ADHD patients themselves sometimes do not agree with the diagnosis, which is called in medical terminology, a lack of 'insight' (Wender, 1995, p 178). In contrast, sometimes patients could get information on signs and symptoms of ADHD

from the media and request the diagnosis from clinicians (Conrad and Leiter, 2004, Conrad and Potter, 2000, Conrad, 2007).

The diagnosis of ADHD appears to be dependent on social situations. Parr et al (2003) have observed that girls are diagnosed earlier and suggest that, as a hyperactive girl is more different from her peers, she comes to attention earlier. Therefore, social factors such as condition of peers, and awareness of teachers and parents could have a direct influence on the diagnosis.

Finally, as there is no objective, practical organic indicator for ADHD, the diagnosis is in practice based on the consensus of health care professionals (Wender, 1995).

2.2.2 Anti-psychiatry views

‘Anti-psychiatry’ refers to various critics of psychiatric theory and practice (Pilgrim, 2005, p 149). Considering ADHD, one of the main criticisms is related to the profit-seeking of drug companies and health care professionals, who are claimed to use medical definitions to legitimate their products and position (Timimi and Taylor, 2004, Baughman and Hovey, 2006). In addition, the scientific basis of psychiatric diagnostic classifications such as DSM is disputed (Caplan, 1995). Here, I have based my analysis of the anti-psychiatry view on a range of sources; principal among these was a book, written by Angela Southall (2007): *“The Other Side of ADHD: Attention Deficit*

Hyperactivity Disorder Exposed and Explained”, which is fairly typical of anti-psychiatric sources. In addition, Dr Southall is a British clinical psychologist and makes her critiques in a British context. She focuses on the role of drug companies in medical and psychiatric research and explains strategies that drug companies employ to promote ADHD related drugs.

Underlying reasons for debating ADHD

In previous sections, I introduced some characteristics of ADHD that make it prone to controversy and debate. Those points could explain why some academics, who normally refer uncritically to other psychiatric conditions such as dyslexia and depression, display a sceptical approach towards the existence of ADHD (Southall, 2007, p 14).

However, some debates on ADHD can be seen as part of a wider criticism of psychiatry. For example, Southall (2007), who disapproved of many aspects of ADHD, also disagreed with drug treatments for other psychiatric disorders and suggested the universal success of psychosocial interventions. In addition, she referred to the way responsibilities are taken away from parents of children with ADHD in favour of experts and in this way, criticised ADHD-related power relationships. The exercise of power over patients is not limited to ADHD and could be a part of “western healing practice” (Pilgrim, 1998, p 538).

However, I do not conclude that the debates around ADHD merely results from professional rivalry, as there are psychologists who accept and promote a biological concept of ADHD, such as Barkley (2002), and anti-ADHD psychiatrists such as Timimi (Timimi and Taylor, 2004).

Debates on the existence of ADHD

Challenging the existence of ADHD (Southall, 2007) might seem to be incompatible with narratives of adults who consider themselves to have ADHD, suffered from lifetime ADHD-related difficulties, and found drug therapy helpful. It might seem surprising that authors, who challenge 'the existence' of ADHD, suggest alternative underlying factors or solutions for ADHD. However, on those occasions, the existence of ADHD as a 'biological entity' is rejected, and the difficulties of ADHD patients are attributed to environmental factors. Southall (2007, p 70) provided examples of how psychosocial interventions could be helpful, supporting her conclusion that ADHD arises from inappropriate environmental conditions.

In addition, to reject the biological basis of ADHD it is necessary to challenge evidence, which supports the medical model. For example, Southall (2007, p 41) has criticised studies that support the medical model of ADHD, because of the strategies that have been employed. At the same time, it is notable that the situation for anti-ADHD claims or alternative explanations and solutions might be even less satisfactory since they are supported mainly by personal experiences or non-'scientific' web pages (Southall, 2007, p 27).

Therefore, on formal occasions, the medical model seems to be capable of winning the arguments. For example, when two lawsuits were filed in the USA asserting that the Novartis Pharmaceutical Corporation and the American Psychiatric Association (APA) planned to produce a market for methylphenidate (Ritalin), APA responded:

“The APA will defend itself vigorously by presenting a mountain of scientific evidence to refute these meritless allegations, and we are confident that we will prevail.” (Charatan, 2000, p 723).

Debates on the validity in diagnosis

Introducing ADHD and other diagnostic categories, Southall referred to the subjectivity of diagnosis of ADHD (2007, p 5 and 8):

“ADHD assessment is highly subjective. This is demonstrated by the extreme variation in incidence from country to country and between cities and towns ... there is a reliance on opinion that is rather too subjective. For example, at what stage does ‘fidgeting’ or ‘not listening’-surely very ordinary behaviour in children - reach the clinical threshold? Who decides when something is too much (or not enough)? After all, parents, teachers and doctors vary enormously in what they are prepared to tolerate as ‘normal’.”

As Southall implies, signs and symptoms of ADHD could be found in everybody, the quantity of them is claimed to be greater in ADHD patients, and the threshold for diagnosis is a subjective issue and hence a controversial topic. Similarly, Wender suggested (1995, p 43):

“The predecided cutoff scores arbitrarily determine what prevalence will be found. There are no solid independent validating measures; these are pseudo measures”.

Although the cut-off points might exist in medicine as well, such as for detecting ‘high’ blood pressure, however, in medicine there might be predictive validity, which is not available in psychiatry (Wender, 1995). Therefore, Southall challenged the validity of diagnostic criteria in the DSM and referred to the example of homosexuality, which was taken out of the classification in 1973 (2007, p 9):

“Homosexuals were no different in 1973 than in 1972. They had not suddenly changed their sexual preferences and practices. What *had* changed was the way in which homosexuality was classified, or rather de-classified, reflecting the thinking of the day ... Diagnostic categories are not ‘fixed’ entities, nor are they objective realities. They exist only because we invent them.”

In conclusion, people's perceptions of the validity of ADHD are related to the quality of the signs and symptoms of ADHD and its diagnostic method.

Criticisms on the lack of a holistic view

Critics of ADHD introduce areas that are not usually investigated in the medical model. Southall's (2007) critical view could help in constructing important questions regarding the way the Internet is managed, research is funded, and how people might abuse the label of ADHD. Moreover, Southall suggested that the construction of diagnostic criteria such as DSM and NICE could pose limitations on clinicians. Likewise I have argued that guidelines could reduce the diversity of health care (Sarrami-Foroushani, 2007a).

In addition, Southall (2007) points out the way that some people over-emphasize medical and psychiatric approaches instead of holistic psychosocial ones. She identified sources of problems outside the ADHD patients, in drug therapies or misbehaviours of health care professionals and close relatives of the ADHD patients, who abuse the label to confirm their position or mask their deficits. Therefore, she highlights the possibility of unnecessarily medicating people. However, proponents of the medical model contend that such an approach might deprive people from potential helpful interventions. Kendall et al (2003) explored perceptions and experiences in children and adolescents with a diagnosis of ADHD. Their research participants confirmed the existence of difficulties, which are described by DSM-IV-R criteria and other literature and the authors concluded that the continual debate about

ADHD only further victimizes people who need help. In summary, the current situation indicates a need for better and more comprehensive research into ADHD, and taking account of difference. This thesis is a contribution to that research.

2.2.3 Sociological views

The first point regarding sociological views is whether they are close to medical or anti-psychiatric views. Sociology and medicine have had a closer position in the past, however, they have recently turned away in many areas (Pilgrim and Rogers, 2005). In the case of ADHD, it seems they are even opposing on many occasions, because many of the related works has been based on social constructionism (For example Conrad and Schneider, 1992; see section 1.2). However, anti-psychiatric claims are not necessarily sociological. Therefore, although anti-psychiatry and sociological views of ADHD might hold common ground, I have discussed them separately.

As I previously mentioned, ADHD is an important issue in today's societies, firstly because it affects increasingly more members of society and involves many organisations including educational systems, the pharmaceutical industry and even legal systems. Secondly, it has some special characteristics that make it controversial and an interesting case for sociological investigations. However, despite this situation, there has been little sociological research into ADHD. For example, when I started this study in 2005, there was very limited sociological work on ADHD, and I could not

find any article related to ADHD in over twenty major sociological web pages¹⁸. However, recently a few sociological studies have looked from different angles at the process of diagnosis and treatment in ADHD (Conrad, 2006). For example, sociological studies investigated perceptions of patients' relatives and their negotiation over the disorder (Malacrida, 2004) and the uncertainty of clinicians who diagnose and treat ADHD (Rafalovich, 2005), but the most prominent approach is related to the medicalization theory, which I will discuss in the next section.

Medicalization

The first, and still the main, sociological approach towards ADHD is through 'medicalization' led by Prof. Peter Conrad (Conrad, 1975, Conrad, 1992, Conrad and Schneider, 1992, Conrad and Potter, 2000, Conrad, 2001, Conrad, 2004, Conrad and Leiter, 2004, Conrad, 2006).

Parsons (1970) introduced the notion of medicine being as an institution of social control and after that others used the idea of medical social control by using the term of 'medicalization' or without it (Conrad, 1992). Medicalization implies the increase in the realm of the medical profession (Scott and Marshall, 2005); and includes a range of steps:

¹⁸ I intended to compare the situation between 2005 and 2009; however, there have been considerable changes in the web addresses or their search options that made the comparison difficult and unreliable.

“Medicalization consists of defining a problem in medical terms, using medical language to describe a problem, adopting a medical framework to understand a problem, or using a medical intervention to treat it” (Conrad, 1992, p 211)

Conrad (1975) introduced ADHD (hyperkinesis) as an example of the medicalization of deviant behaviours and suggested that the process involves different components:

- Educational systems and families, who benefit from social control;
- Drug companies, interest groups, who provide a simple technique, i.e. stimulant drugs for the social control and have financial interest;
- Clinicians, who provide legitimacy via labelling the deviant persons as disordered;
- The technique of social control, which are stimulant drugs.

Medicalization according to Conrad and Schneider (1992) will have five stages (p 266). At first, it is necessary to define the behaviour as deviant, and then to announce a new medical discovery claiming a medical source for the ‘deviant’. Subsequently, interest groups from medical or non-medical institutions will advocate the claim, after that the definition should be legally secured and finally the medical definition will be used in medical institutions.

Conrad (1992, p220) suggests that medicalization could have degrees and different phenomena could be minimally, partly and fully medicalised. In

addition, there are “competing definitions” which could affect the degree of medicalization. The competition between conceptual frameworks could include medical and non-medical agencies (Conrad, 1992) or it could be within the medical realm. Therefore, solving a ‘problem’ might be done via medicalization or by other means.

In addition, Conrad (1992) suggested three levels of conceptual, institutional and individual for the medicalization process, which I have summarised in the following table.

Figure 2.1 Illustration of different levels of medicalization.

Levels of medicalization	Processes and related elements
Conceptual	<p>Claim-makers, media</p> <p>Phenomenon A → Disorder A</p> <p>Introducing a new health problem</p>
Institutional	<p>An informal concept of a disorder</p> <p>Law-makers, authorities → A formally and legally acceptable disorder</p> <p>Regulations</p>
Patient- doctor	<p>A health care professional</p> <p>A person → Patient of disorder A</p> <p>Clinical diagnosis</p>

According to Conrad and Schneider (1992, p 8) medicine is among the “institutions of social control” similar to the legal system and religion and they emphasised that “The authority to define brings the most social control”. This suggests that defining ADHD as a disorder could change the way people look at this phenomenon; labelling the phenomenon as a disorder, which implies that it is a ‘problem’, whereas by contrast some authors believe ADHD is a gift (Hartman, 2003).

Therefore, medicalization theory refers to problems of the biomedical model similar to the anti-psychiatry views (Conrad and Potter, 2000, Illich, 2003, Gabe et al., 2005). Illich (2003, p 291) classified the criticisms into categories of direct and indirect iatrogenesis (i.e. problems made by health care professionals (Reber et al., 2009)) and structural problems.

In the case of ADHD, ‘direct iatrogenesis’ could refer to the side effects of medications. An example of ‘indirect iatrogenesis’ is confirming social settings, such as educational environments and reinforcing them to avoid change. Finally, reducing people’s autonomy by putting them under the control of clinicians could be an example of ‘structural problems’ caused by the medicalization of ADHD.

Similarly, Goldstein (1979, p 382) states that sociologists’ criticise medicalization for two reasons:

“First because it omits interpersonal and social factors, especially those based upon social differences, conflicts, and power differentials; and second because it places individuals under the control of the physicians who may employ incarceration, drugs, electro-shock, and other “treatments”...”

For Goldstein, medicalization locates the problem within the patients themselves, rather than in social settings. Nevertheless, despite such criticisms, the availability of new treatments could facilitate the medicalization of other phenomena in future (Conrad, 2005).

However, in contrast to anti-psychiatry views, medicalization theory has confirmed positive aspects of the process as well (Gabe et al., 2005). For example, Goldstein (1979) considered some useful practical consequences for the medicalization of deviant behaviours (mental illnesses), including:

“The implication of the diminished responsibility, the control of the situation through diagnosis and treatment by medical as opposed to civil or other authorities, and the directing of the attention towards the possibility of organic and/or intrapsychic origins of the problem” (p 382).

2.2.4 Overview of various views towards ADHD

Key elements in existing views towards ADHD

I have introduced the medical model, anti-psychiatry, and sociological views of ADHD. In the following parts, I will identify four key points from the different viewpoints of ADHD.

Differences between ADHD patients and 'normal' people

The most basic element of the medical model is that differences exist between people with ADHD and people who are 'normal'. As previously discussed, the difference is mainly in the quantity, rather than the quality, of symptoms. Therefore, people with an anti-psychiatry view might reject this distinction saying, for example, that an ADHD diagnostic tool "describes things that *all* children do" (Southall, 2007, p 8).

Application of the medical label (diagnosis)

The next main point of conceptual difference is in the application of a medical label or diagnosis. Many anti-psychiatric and sociological arguments start at this level, as there is acceptance that people with signs and symptoms of ADHD are different, but not with the medicalization of them.

Drug therapy

The third key point of difference is in drug therapy. This is an aspect of the medical model that is challenged by many sociologists and almost everyone from an anti-psychiatric position. Critics on drug therapy relate to its adverse effects and their relation to the professional power of psychiatrists (Cohen, 2004). Although the motivation of drug companies' quest for profit is a persuasive point, this is not a sufficiently good reason to dismiss drug therapy without an analysis of its effects. However, the existence of grants for drug therapies and a lack of such support for alternative options is a serious concern (Southall, 2007, Sarrami-Foroushani, 2007a).

Appropriate responsible group

The question of who is responsible for solving the 'problem' is another point of difference. Depending on where people stand in relation to the other three points of difference, they might favour parents, teachers, psychologists, psychiatrists as the appropriate group responsible for the management. For example, according to the medical model, drugs are a principal part of the treatment and therefore psychiatrists are the main professional group responsible for the management of ADHD.

Which view is more popular?

In previous sections, I introduced different views of ADHD. In order to investigate the extent of the availability and public presentation of each view, I explored a sample of web pages to see which view is most widely represented on the internet (Sarrami-Foroushani, 2008). I considered the internet, as a place, where the different views could be represented. On the one hand, there could be anti-psychiatry claims, as some health care professionals have complained of myths and incorrect information that exist around ADHD (Barkley, 2002). Clinicians could be affected by the media, as Rafalovich (2005) observed practitioners expressed media-related uncertainties towards the diagnosis and treatment of ADHD. On the other hand, the medical model of ADHD could be found on the internet and so increase the knowledge of lay people, thereby facilitating their acceptance of medical definitions (Conrad and Potter, 2000, Conrad and Leiter, 2004). It was seen that the internet could either facilitate medicalization (Clarke et al., 2003) or induce resistance to it.

In order to investigate the availability of different views of ADHD, I used five types of search engine in Google¹⁹, and randomly selected 30-50 pages from available pages for the term “attention deficit hyperactivity disorder”. I then explored each page for the main concepts of the existence of difference, the application of labels, and the utilisation of drugs.

¹⁹ Google web, news, groups, blogs, and scholar

I found that the majority of web pages agreed with themes described in the medical model. Around 90% of pages confirmed the existence of ADHD and of it being a medical disorder. More than half of the pages agreed with the use of stimulant drugs for treating ADHD and a fifth of web pages, reported disagreements. The main objections to the medical model of ADHD was the use of drugs, followed by the labelling of patients (Sarrami-Foroushani, 2008). My observations indicate that there is variation in current views of ADHD on the internet, and that the dominant voice is that of the medical model.

2.3 Variation in the clinicians' perception and approach

In previous sections, I acknowledged the existence of different views of ADHD. In this section, I explain why there might be such variation in the clinicians' perception and approach and I will explain my reasons for the importance of this phenomenon.

Perception could have a range of meanings including: "processes that give coherence and unity to sensory input ... an awareness of the truth of something" (Reber et al., 2009, p 566). In this study, by "perception of clinicians" I refer to clinicians' understanding of a client's condition, which is reflected in items such as clinicians' approach and suggested diagnosis and treatment.

Although variation in the perception and approach of clinicians is related to a range of common concepts, such as clinicians' disagreement, reliability of diagnostic methods, co-morbidity, and differential diagnosis, it is not equal to them. I will explain that point in the next section.

2.3.1 What is “variation” in clinicians' perception and approach?

The variation in clinicians' perception and approach towards a client could be reflected in the suggested diagnosis and other related issues such as aetiology and treatment. There are other terms that are related to variation, such as disagreement, reliability, co-morbidity and differential diagnosis. In the next paragraphs, I will explain the difference between those terms and 'variation', and my rationale for selecting the later term.

Although disagreement of clinicians leads to variation in their approach, variation could be caused by other reasons as well. For example, two clinicians, who both believe in the medical model of ADHD, might approach similar clients differently, because of their different work setting. In addition, disagreement implicitly refers to a problem that should be solved; while 'variation' describes the situation with less predetermined values.

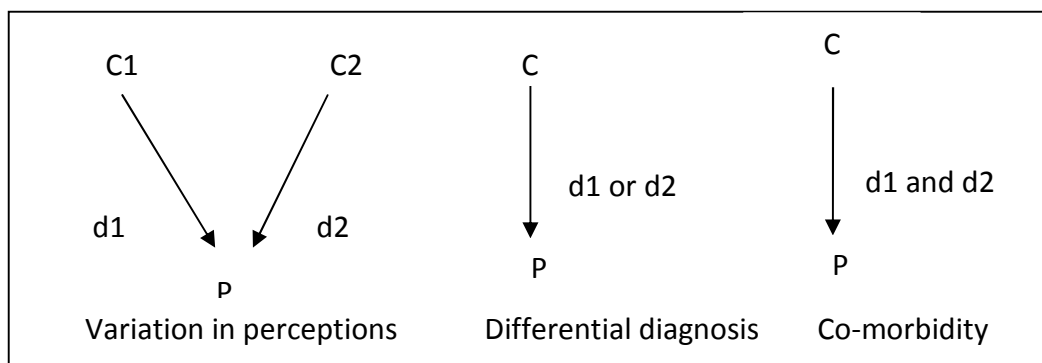
A lack of reliability in diagnostic methods could also lead to variation, although variation might arise from different reasons. For example, clinicians might differ in their diagnostic method, or clinicians might approach clients without relying on guidelines. In those later situations, resulted variation is

not related to lack of reliability of diagnostic methods. In addition, reliability indicates that offering similar diagnoses is desirable and therefore, lack of reliability, similar to disagreement, informs of a negative situation; while 'variation' imposes less desires on the observation.

Co-morbidity refers to situations where clinicians attribute two or more clinical diagnoses to one particular client. It is not necessarily a reason for variation, as different clinicians might similarly diagnose the co-morbid conditions. However, the attribution of co-morbidity could make the situation more complex and introduce the possibility of variation.

Differential diagnosis refers to situations where clinicians feel the necessity to make a choice between 'similar' diagnoses, before making a specific decision. However, variation refers to the outcome of the interaction between clinicians and clients. The following diagram compares these different concepts.

Figure 2.2 illustration of variation in perceptions, differential diagnosis and co-morbidity (C: Clinician, P: Patient, d: diagnosis)



It is notable that the total variation that might exist in the diagnosis of medical and psychiatric conditions could be a combination of the variation in patients (biologic variation), and the variation in performance and measurement of the clinicians (measurement variation) (Fletcher et al., 1996, p 25). In this study, I am exploring the later type only. For example, in the above figure, I have considered one particular person/patient, and therefore have overlooked the biologic variation in order to focus on the clinicians' side.

2.3.2 Why variation might exist in clinicians' perception and approach?

Other studies

Considering the relationship of variation in clinicians' perception and other concepts, which I explained in the above section, it is possible to verify existence of variation, based on those related concepts. For example, following studies reports existence of disagreements on ADHD:

McKenzie and Wurr (2004) observed disagreement of clinicians towards childhood ADHD. They explored the views of paediatricians and child psychiatrists in the UK regarding different aspects of ADHD in children. The result of their survey indicated disagreements in views of their participants on aetiology, classification and diagnosis.

Parens and Johnston (2009) explored the views of clinicians and researchers during five workshops in the USA, and found that their

participants had different values on the treatment of children with ADHD and also held competing views on diagnosis.

The philosophical theory of knowledge

As discussed in section 1.2, some epistemological standpoints, such as social constructionism and critical realism, indicate possibility of different understandings of a unique phenomenon. In this section, I discuss that point in more details.

Although social constructivism²⁰ could refer to different approaches, it broadly suggests that the knowledge is dependent to its producers: “reality is not self-evident, stable and waiting to be discovered, but instead it is a product of human activity” (Rogers and Pilgrim, 2005, p 15). In this perspective, perceptions of clinicians and psychiatric diagnosis are also socially constructed (Brown, 1995). Therefore, it is possible that different clinicians generate different perceptions over similar clients.

Similarly, critical realism implies that people’s understanding of mental disorders could be various (Middleton, 2007, Middleton and Shaw, 2007, Middleton, 2008). Application of critical realism to psychiatry implies that no one could have a universal standpoint in psychiatry and variation could be anticipated, as Middleton (2007, p 41) suggested:

²⁰ According to Reber et al (2009, p 748) ‘constructivism’ refers to a more moderate point of view comparing with constructionism.

“Critical realism provides a position from which the contributions of differing perspectives can all be acknowledged but at the same time recognised as providing only a partial explanation of the object of study constrained by their individual context and methods ... no one of the very many theoretical, research and/or therapeutic approaches that might fall under a wide umbrella of mental health research, psychiatry, mental health practice and mental health services can be expected, on its own, to provide the basis of an all-embracing theory or a universally effective family of therapeutic interventions.”

In the above paragraphs, having different understandings in general was discussed. In the next section, I will introduce possibility of different interpretations of texts, i.e. means of communication.

Hermeneutical factors

Hermeneutics is related to medicine and psychiatry and it could help to understand variation in clinicians' perceptions. It is introduced as:

“The science of interpretation and maintains an interest in the content as well as the form of what is being interpreted. The term itself originated with the practice of interpreting sacred texts” (Scott and Marshall, 2005, p 322).

Daniel (1986) has shown the medical process of decision making to be prone to interpretations similar to those found in reading a poem or a story. He referred to the long history of hermeneutics and concluded that any sort of meaning-exchange such as those emerging from medical signs and symptoms could be considered as a text. Although traditionally clinicians are known to read signs and symptoms, Daniel (1990, p 5) suggested:

“Only recently has there arisen shared scholarly reflection on the nature of interpretation as practiced by clinicians”

Similarly, as clinicians interpret the meanings behind signs and symptoms, Leder (1990) suggested that medicine is a hermeneutical activity. For this reason, he believed that medicine could not achieve complete objectivity, and it will always involve subjective activities; as he (ibid, p 9) argued:

“Clinical medicine can be best understood not as a purified science but as a hermeneutical enterprise: that is, as involved with the interpretation of texts”.

Leder (1990) expands the concept of text from written words to all senses, because to understand the meaning they are conveying it is necessary to perform interpretation. Since clinicians have to interpret different items, Leder suggests that clinicians are reading different texts in their interaction with clients and need to interpret their own experiences and knowledge in relation to that client ('experimental text'). Then they interpret speeches of the client ('narrative text'), their direct observation ('physical text'), and their indirect observations through the medical instruments ('instrumental text') (ibid, p 11-15). These 'secondary' texts together comprise the main 'primary' text that clinicians have to read and interpret, which is the 'person-as-ill' (ibid, p 11). Therefore, according to Leder, if clinicians are undertaking a subjective duty, then variation could be anticipated. In the following parts, I further explain how Leder's hermeneutical model could anticipate variation.

The first important aspect of Leder's model is the emphasis on the importance of pre-existing perceptions in the understanding of clinicians of their clients. Such perceptions are formed by the education and past experiences of clinicians. Leder suggested (1990, p 11& 12):

“By the time the patient arrives at the doctor’s office, he/she has already gone through an elaborate interpretive process ... The doctor ... has been trained in a series of conceptual and technological frameworks which can be employed to ‘make sense’ of the patient’s symptoms”.

The concept of pre-existing conceptions or “frames of reference” refers to a general theme related to a number of fields including psychology of perception, social psychology, linguistic, sociology and anthropology (Atherton, 2008).

In addition to frames of reference, Leder (1990) also explained how clinicians could influence the process of diagnosis by starting with a hypothesis, asking specific questions and observing the physical body and instrumental reports in particular ways. For this reason, Leder introduces patient, patient’s body and doctor as different authors of the ‘person-as-ill’.

In addition, Leder (1990) referred to the concept of ‘translation’ of physical experiences, related concepts and perceptions into language and written words. This translation could happen on different occasions, such as when patients narrate their problem for the doctor, when doctors conclude their interaction with the patient and write the diagnostic chart and when diagnostic tests translate the disease into numbers. In contrast to those occasions in which language is involved, Leder referred to other situations in which the body directly reveals itself to the perception of clinicians. Similarly,

he referred to the occasional independency of clinical wisdom from the language:

“The physician’s hands have come to know the feel of a tumor, though she may have difficulty formulating this corporeal wisdom into logic of principle and rules.” (p 14)

Therefore, clinical diagnosis comprises translation of physical symptoms into language and a ‘corporeal wisdom’, which are dependent on the individuals, and therefore they could contribute in variation in clinicians’ perception and approach. Such an analysis is useful in appreciating the subjectivity that exists in the process of diagnosis. Leder (1990) confirmed the objectivity that biological signs could bring:

“Here then is the text of the physical exam. Symptoms give way to physical signs, the ‘subjectivity’ of the patient to the ‘objectivity’ of visible lesions.”(p 14)

However, he ultimately suggests that even in the presence of objective signs and tests, there would always be a need for interpretation and so there is no escape from subjectivity. He considered all the practices interpretable by

referring to the importance of previous pre-conceptions in understanding and interpreting objective measures:

“Through clinical training, the doctor’s senses have been shaped into acute and knowledgeable instruments ... the trained eye of the radiologist *sees* the fracture or pneumonia on X-ray, where the student still encounters a series of opaque blotches”(p 14 & 15)

Leder (1990) referred to some occasions in the process of diagnosis that involves language; for example, he referred to situations where non-language elements are translated into language. However, he did not precisely locate involvement of language. The reason that Leder was not clear on that point is because he considered all the different types of perception to be subjective and his definition of text enabled all diagnostic activity to incorporate different sorts of ‘text’. This made his hermeneutical analysis too general, in a way which could not differentiate between medicine and psychiatry. Similarly Svenaeus (2000, p 174) criticized Leder:

“He proceeds from a very broad definition: for Leder, the text is “any set of elements which constitutes a whole and takes on meaning through interpretation”. Is not this definition of text so broad that it threatens to

render the concept of text vacuous? Cannot almost anything be taken to be a text according to this definition?"

In addition, Baron (1990, p 27) has criticized Leder's metaphor of text for a different reason:

"Perhaps this is what I find most troubling about Leder's analysis: the sense one has that a text is a fixed thing which can be subject to interpretation. Patients are *not* static things in the way that the Folio Edition of Shakespeare is."

Moreover, Leder (1990) argued that subjectivity could exist even in presence of objective signs and tests and therefore in his analysis he did not differentiate between psychiatry and medicine. Therefore, although there should be more investigations on existence of variation and its underlying reasons, particularly in psychiatry, Leder's analysis is helpful in understanding of variation.

Overall, above discussions on hermeneutic suggest the possibility of variation in perception and approach of clinicians towards similar clients.

Uncertainty

Uncertainty is another probable source of variation. It refers to:

“an element of medical training and practice that mediates the management, delivery and reception of medical knowledge in clinical situations” and is a consequence of rapid growth of knowledge (Gabe et al., 2005, p 101).

ADHD, especially in adults, has only recently been introduced and there are many complexities and risks around its diagnosis and treatment. Therefore, there are grounds for acknowledging the existence of uncertainty around ADHD in regard to what Adamson (1997, p 134) called ‘existential’ uncertainties and also socially constructed uncertainties, which he named ‘clinical’ uncertainties. Clinicians may use uncertainty as a tactic to avoid undesirable news and emotions (Davis, 1960). As drug-treatment of ADHD is controversial, uncertainty may be used to manage the situation. However, clinicians might vary in this perspective; therefore, uncertainty could be another underlying cause for variation in clinicians’ perception and approach.

Differences in Medicalization

Medicalization might be related to variation, as the existence of competition in defining a medical concept could lead to variation. For example, if a phenomenon is medicalised in two different ways, this might cause people with that condition to be perceived as having two different conditions. There are psychiatric conditions such as borderline personality disorder (BPD) and bipolar mood disorder (BMD) that have similar signs and symptoms to ADHD

(Wender, 1995). These conditions and other items might work as competing definitions of ADHD.

Medical errors and Malpractice

Malpractice refers to “improper treatment or culpable neglect of a patient by a health service professional” (Gabe et al., 2005, p 252). The existence of medical errors could explain some variation in clinicians’ perception and approach. However, the existence of variation does not necessarily mean being wrong , as perception and resultant practice could be different without being ‘improper’ or “a form of exploitation of the client to gratify the practitioner” (Pilgrim, 2005, p 141).

However, in order to offer a ‘better’ medical diagnosis for a patients, clinicians have to rely on an estimation of the probability of different diseases (Harold et al., 1988). Nevertheless, estimation of the probability is prone to error based on the personal ability and performance of different clinicians. Such errors may be explained by the cognitive processes (heuristics) of clinicians, a notion introduced by Tversky and Kahneman (1974):

“Many decisions are based on beliefs concerning the likelihood of uncertain events ... people rely on a limited number of heuristic principles which reduce the complex tasks of assessing probabilities and predicting values to simpler

judgmental operations. In general, these heuristics are quite useful, but sometimes they lead to severe and systematic errors.” (ibid, p 1124)

Resultant errors may constitute one form of variation in clinicians’ perception and approach.

2.3.3 Why is evaluating variation in clinicians’ perception and approach important?

Variation as a sign of change

Variation is a key concept in understanding the changes that occur over time. For example, in linguistics, it is well known that languages change over time (Trask and Mayblin, 2000) and it is because of the variation that the change could happen:

“Variation, we now understand, is the vehicle of change. When a change is in progress, the older form and the newer form coexist, and almost everybody is familiar with both forms, even if some people use only one or the other. Over time, the older form becomes less and less frequent, and the newer one becomes ever more frequent, until one day, there is no one left alive still using the older form, and the change is complete” (Trask and Mayblin, 2000, p 101)

Psychiatry has also been a changing field, and to learn about the changes it is important to monitor and understand role of variation that could exist in clinicians' perception and approach.

Health policy

According to Ritzer (2006) health care, like other aspects of society, is 'McDonaldized'. This means that policymakers focus on increasing efficiency, calculability and predictability. They might try to homogenize clinicians via managerial and governmental controls such as guidelines. Therefore, variation in clinicians' perception and approach could have many implications for health care policies. In addition, the existence of variation in clinicians' perception and approach could lead to discrepancies in estimations of prevalence and other health-related data, which form the basis for making policy.

Clinical implications

Studying variation in clinicians' perception could contribute to the knowledge of the ways in which diagnoses are made. Similarly, sociolinguistic studies of 'variation' have increased the knowledge of language and the way people use it (Trask and Mayblin, 2000).

In the following section, I compare the concepts of ADHD in adults, with 'addiction interaction disorder' and suggest that the situation might

show variation in clinicians' perception and approach towards similar patients. I will use this example to illustrate how appreciation of variation could have clinical implications.

Both addictions and ADHD have received the attention of sociologists as examples of the medicalization process. Addiction to opiates (Conrad, 1992) and alcohol (Schneider, 1978) have been introduced as examples of the medicalization process, in a similar way to hyperactivity (Conrad, 1975) and it continues to expand. Diagnosis of hyperactivity was once limited to children, but now includes adults as well (Conrad, 1992). The concept of addictive disorders that started with addiction to substances, has also expanded to behavioural addictions such as compulsive buying, eating disorders, compulsive gambling, sex addiction and workaholism (Coombs, 2004). Therefore, in a similar way to ADHD, addiction could be applied to a wider range of people.

I suggest the above example, given that it shares important similarities and characteristics to ADHD and addiction, but clinicians who work on one of them, might overlook the other. For example, in a book on addictive disorders (Coombs, 2004), ADHD was not introduced, while following similarities existed in descriptions of the concept of 'addiction interaction disorder' (Carnes et al., 2004, p 31):

- Addiction is introduced as a problem of attention and consciousness that could involve any sort of activity. It is argued that a group of

people, due to their genetic condition, are looking for stimulation, which they could get from an addiction. They move to a different addiction, if they cannot access to the previous one. Addicts move between different addictions such as chemical dependencies, compulsive gambling, sex addiction, eating disorders, workaholism and compulsive buying, and this is why it is called 'addiction interaction disorder'.

- Addiction, similarly to ADHD, is introduced as a brain disorder and related to dopamine, which is caused by genetic factors and formed by environmental factors.
- The medical concept of addiction is introduced as a growing concept that is moving from a moral and behaviour perspective to the 'disease' model.
- Alcoholism and different addictions have been suggested to be genetically related. Wender (1995) has also suggested ADHD to be genetically linked to alcoholism. Addicts, like ADHD patients, usually receive more than one diagnosis.
- Like ADHD patients, addicts usually lack insight and are, therefore, unable to see their own condition.
- In both ADHD and addictions, patients' lives are chaotic and the diagnostic criteria of conditions are comparable. For example, addicts are preoccupied with their addiction (that might cause attention and concentration difficulties), addicts follow addictive behaviour despite its consequences (being impulsive), become restless when not

following their addiction (hyperactivity) and are likely to have vocational, educational and relationship problems. While the person might be preoccupied with different addictions at different times, they would have attention difficulties, impulsiveness and hyperactivity all the time. An individual, who spends a long time writing unnecessary memos, might be perceived either as a workaholic, or as an ADHD patient who struggles to overcome their condition. Even without referring to ADHD, one type of workaholism is introduced in the following way: "Attention-deficit workaholics are adrenaline-seeking workaholics who are easily bored and constantly seeking stimulation. They are high work initiators but are low in work completion. They have many bright ideas and creative solutions but have difficulty focusing on the task before them, get bored, and jump ahead to the next item on the agenda, leaving many projects unfinished." (Coombs, 2004, p372). That description is similar to the diagnostic criteria of adult ADHD: "Being always on the go, dysphoric when inactive ... Depression being described as being "down", "bored", or "discontented" ... disorganization, inability to complete tasks: the subjects report lack of organization in job, running household, or performing school work; tasks frequently not completed; subjects switches from one task to another in haphazard fashion disorganization in activities, problem solving, organizing time, lack of "stick-to-it-tiveness" ." (Wender, 1995, p 242).

- Similar to ADHD, psychiatric drugs that increase neurotransmitter levels, have been used to treat addictions. The treatment aim is in controlling signs and symptoms, as addictions, like ADHD, are perceived to be incurable.
- It is argued that addictions might inhibit each other, which means that using one addiction might prevent other types of addiction. In this perspective, the application of a stimulant could be interpreted as substituting an acceptable addiction with a destructive one.

Overlaps between the diagnostic criteria of ADHD and addictions were not identified on previous occasions (Coombs, 2004). In other situations, ADHD has been identified as a condition that could increase the risk of addiction (Shaw et al., 2005), and is the underlying disorder of addictions, and therefore its treatment could lead to treatment of addictions as well (Grant and Kim, 2003). Wendy Richardson (2005) has discussed this in one of her books. She points to the similarities and shared characteristics of ADHD and addictions and the way that ADHD patients self-medicate their symptoms with alcohol, drugs, and compulsive behaviours. Alternatively, someone with ADHD may be regarded as a 'stimulus junkie' with an 'addiction to adrenaline' (Kelly and Ramundo, 2006, p 334).

ADHD and addictions are sometimes diagnosed together at considerably high rates. Adult ADHD has been identified in patients diagnosed with substance use disorder, in various proportions 30 - 50 % (Konig et al., 2007) 10-50% (Levin et al., 1998, Garland et al., 2001, Horner and Scheibe,

1997, King et al., 1999, Kalbag and Levin, 2005, Modigh et al., 1998). Other studies, where ADHD patients have been compared to normal subjects, it was reported that the probability of the use of illegal drugs is twice as high, and the probability of heavy use is four to five times as high (Molina et al., 1997, Mannuzza et al., 1998, Biederman et al., 1995, Biederman et al., 1998, Modigh et al., 1998, Roy-Byrne et al., 1997). It has also been reported that recovery from drug addiction takes longer in ADHD patients compared to normal subjects (Biederman et al., 1998) and that age of onset of addiction is lower (Carroll and Rounsaville, 1993). ADHD increases the probability of drug addiction in both sexes (Wilson and Levin, 2001) but is slightly higher in boys (Comings, 1994).

The prevalence of ADHD in juveniles that have been institutionalized due to alcohol use has been reported to be as high as 50 % (Garland et al., 2001). Generally, ADHD symptoms are frequent in alcoholics (Ponce Alfaro et al., 2000). Also, alcoholism is seen in family members of ADHD patients (Milberger et al., 1997b).

The probability of habitual cigarette smoking at a younger age is higher in boys who have a diagnosis of ADHD (Riggs et al., 1999). Siblings of ADHD patients are also more likely to start smoking at a younger age (Milberger et al., 1997a). It seems that having ADHD makes cigarette cessation more difficult (Coger et al., 1996).

Having a history of ADHD in childhood is the only psychiatric diagnosis that has a significant and meaningful statistical relationship with paraphilia, socially unacceptable and violent sexual desires (Kafka and Prentky, 1998).

Finally, a strong association have been found between ADHD and pathological gambling (Specker et al., 1995, Sood et al., 2003, Carlton et al., 1987, Carlton and Manowitz, 1992).

At the moment, despite the many similarities between the definition of ADHD and 'addiction interaction disorder', the successful treatment of each one is not used for the other. ADHD has not been treated with twelve steps (which could be justified by the long-standing conceptual and behavioural problems in ADHD patients) and 'addiction interaction disorder' is not treated with stimulants (which could be justified as substituting an acceptable addiction with a destructive one). However, if empirical data could suggest the two diagnoses are systematically offered for the same people, then this could bring the attention of researchers to probable implications.

Therefore, variations in clinicians' perception and approach could inform of important gaps in current knowledge and it could have theoretical and practical implications.

2.4 Summary and Conclusion

In this chapter, I have illustrated various perspectives that exist with regard to ADHD. In addition, I introduced the concept of variation in clinicians'

perception and approach and suggested that investigations in this field could have a range of theoretical and practical implications. Considering those views, the similarity and coincidence of ADHD with other disorders, and recent introduction of ADHD in adults, I anticipate finding variations in clinicians' perception and approach towards adult ADHD.

Therefore, I will evaluate variations that exist in clinicians' perception and approach towards an adult with ADHD. This study could help achieve a better understanding of both 'ADHD in adults' and more general issues as I aim to provide evidences that inform underlying reasons of variation.

It is notable that by aiming exploring the variation that exists in clinicians' perception and approach, I am not going to evaluate ADHD itself. Conrad and Schneider introduced deviance is an "imputed condition" (Conrad and Schneider, 1992, p17), and in this perspective, I will study the 'imputers' instead of the condition.

Finally, it would be helpful to explore the idea of clinicians and their attitudes towards variation to see whether their observation and experience confirms the existence of variation and where it does, how they perceive and justify it.

2.4.1 Research questions

By considering the concepts of ADHD and variation in clinicians' perception and approach, I have illustrated the importance and necessity of the following research questions:

1. What variations can be found in clinicians' perception and approach towards people with mental disorders, such as adults with ADHD?
2. What factors are related to presence/absence of those variations?
3. How competing conceptual frameworks are related to those variations?
4. How differences in awareness of clinicians are related to those variations?
5. How presence of uncertainty in clinicians is related to those variations?
6. How existence of overlap and/or confusion in related diagnostic criteria is related to those variations?
7. How clinicians perceive those variations and their related factors?

In the following chapter, I will explore the method that I have developed to collect relevant data for answering the research questions, and explain the conduct of the study.

Chapter 3 : METHODOLOGY

3.1 Designing the research method

As I previously mentioned, my research questions were in the form of ‘What?’ and ‘How?’ so my first priority was not in counting and calculating. I intended to investigate the meaning of the signs and symptoms of ADHD for clinicians and needed a research method that would enable me to access detailed data on clinicians’ views on the topic. All of these points implied the necessity of undertaking a qualitative study (Buston et al., 1998). In this section, I explain how I designed my qualitative method, which consists of application of vignette simulations and post-simulation interviews.

According to Silverman (2005, p 302-3) the structure and content of the methodology chapter is dependent upon the type of study, which in this case could be divided into three categories of ‘theoretical’, ‘methodological’ and ‘empirical’. I position my study, like most other dissertations, into the category of empirical studies, which indicates I should display my understanding of the strong and weak areas of my research design in the methodology chapter. Therefore, in this chapter I will explain frankly and specifically all the stages of my research, including design, data collection and data analysis. I will also refer to the methodology-related literature wherever necessary. I aimed to clarify why I have chosen the method that I have, what

theoretical and practical factors have influenced the course of my decision-making, what difficulties I faced and how I managed my research.

In the following part, I will explain how I explored a variety of ways that could potentially be useful, before adopting my final research method.

3.1.1 Considering retrospective evaluations of patients' history

One potential method to answer my research questions could be evaluating the experience of people with ADHD. For example, McGough et al (2005) explored retrospective psychiatric co-morbidity in adult ADHD patients, and Kendal et al (2003) explored perceptions of children and adolescents with ADHD. I could investigate the variation of diagnoses and treatments, which have been offered to people with ADHD. An advantage of this method would be in providing access to what has really happened. For example, if an adult with ADHD has a history of being evaluated by many different clinicians, I could consider the variations in suggested diagnosis and treatment plans. However, there were some discouraging aspects to this plan.

In this method I could have limited information about the presentation of 'patients' at the time of diagnosis and I probably could not talk to the clinicians who offered the different diagnoses at various times. Even if I could find and contact related clinicians, they might have difficulty in remembering details of the situation related to a diagnosis made in the past.

Therefore, it would be difficult to explore the underlying reasons of observed variations.

The other point is related to the referral system in the NHS. As patients are screened and referred by general practitioners, I was not sure to what extent a patient might visit different clinicians. As a result, if my research was based on a retrospective evaluation of patients, I could not be sure that the patients would have any experience of being evaluated by different clinicians. Therefore, I might not be successful in evaluating variations that could exist and a strategy of retrospectively evaluating a patient's history has serious limitations for my research aims.

3.1.2 Exploring performance in different clinicians

I could investigate clinicians who are responsible for diagnosing ADHD in adults. I could gather necessary data, such as reasons for not/diagnosing ADHD and potential alternative diagnoses by approaching them directly. In some studies, clinicians' perceptions of ADHD have already been explored. Klasen and Goodman (2000) performed semi-structured interviews with 10 GPs and 29 parents of hyperactive children in London. Shaw, et al (Shaw et al., 2003) intended to explore the perception and approaches of Australian GPs toward ADHD by running six focus groups that included 28 GPs. However, if I decided to ask that of clinicians regarding 'ADHD', I would only know how they would consciously think about the label and concept of 'ADHD'. This conscious idea could be different from their perception of clients with signs

and symptoms of ADHD, and which might be diagnosed differently. Exploring this point could have many important implications, such as the awareness of alternative diagnoses and underlying reasons for them being diagnosed differently. In order to investigate this, I need to evaluate the performance of clinicians with regard to an adult with ADHD, where nobody has labelled the person as 'ADHD'. Therefore, directly questioning clinicians over ADHD has limitations for exploring variation so I have to look for an alternative method.

3.1.3 Exploring the performance of different clinicians with a real patient

The next method that I considered was seeking help from a real patient, asking different clinicians to evaluate him/her, recording the process and performing interviews with the clinicians. This seemed to be a promising method and capable of answering my research questions. However, it was practically very difficult. On the one hand, I needed a cooperative patient that could spend some months on this research and on the other hand, I needed considerable cooperation from several clinicians. Therefore, for this project, I anticipated the need for more resources and time than I could afford. In addition, there was no guarantee that the interaction between the patient and clinicians would be similar. This could make interpreting any observed variation difficult.

3.1.4 Exploring the performance of different clinicians using role-play

I thought I could play the role of an ADHD patient and then seek the opinions of different clinicians. In this way, I would not need a patient to spend a long times on this research. However, I would still need considerable cooperation from clinicians and interpreting results of such a study could be controversial due to quality of the played role and the complex interaction between an 'actor' and clinicians.

3.1.5 Exploring the performance of different clinicians using a vignette

The final solution was in applying a written vignette. Researchers have used vignettes in studies to investigate mental disorders such as ADHD. In a study in the Michigan Children Hospital (Liu et al., 1991), a case vignette of an 8 year old boy was presented to 50 mothers of ADHD children and 50 control mothers to explore the social acceptability of drug therapy in ADHD. In two other studies in the University of Southampton (Maniadaki et al., 2005a, Maniadaki et al., 2005b), vignettes were used to explore the influence of the sex of children and parents in their attitudes towards ADHD. In a study at the University of California (Wakefield et al., 2002), vignettes were used based on descriptions of DSM-IV diagnostic criteria for conduct disorder and presented

to the clinically experienced graduate students to explore their judgment. Therefore, for my research, I needed to prepare a written description of an adult with signs and symptoms of ADHD and present it to clinicians. I could check the existence of variance in the perception of clinicians and explore the reasons for potential variations. In this way, many of the problems of previous methods could be overcome. Sending a written vignette seemed to be much more practical than role-playing or observation. By applying a written vignette, I could make sure that all clinicians have received information that is sufficient and similar in all cases.

However, there are limitations to written communications as explained in the following paragraphs; therefore, I decided to perform semi-structured interviews in combination with the application of a written vignette. The interviews would be helpful in going into more depth on the topic. I expected the respondents to provide short answers to the questionnaire, but the interviews could provide an extended amount of data. In addition, the interviews would be helpful as a means of validating and exploration.

Some researchers present questionnaires at the interview sessions and perform 'guided interviews' (Keats, 2000, p17). However, as the presence of an interviewer might influence the replies of respondents, I decided to send the vignette and related questions first and let the participants answer them without my being present, and then perform interviews at another time. Therefore, my ultimate research method was to send the vignette and related

open-ended questions followed by semi-structured interviews with selected respondents. Bryans and McIntosh (2000) have found this method of using a simulation and “post-simulation interviews” to have a great potential in the assessment of clinical practices.

The lack of exploration of the interaction of clinician and client, and their negotiation, is a limitation for applying vignettes. Clinical diagnosis has two parts: obtaining information and interpreting the information (Harold et al., 1988). For clarification, I conceptualize those processes by the following analogies: a medical student at first visits a client and drafts notes, and then asks a senior clinician to suggest a diagnosis through consideration of the notes. Alternatively a clinician writes down his/her observations and takes notes during the interview with a client and then considers the result and decides upon a diagnosis and treatment based on the notes. Therefore, the process of diagnosis consists of one stage of ‘translation’ of the client’s condition into words, and then a comparison of the resulting words with ‘reference-knowledge²¹’. In this study, I ask the participants to give their opinions on a written vignette, which is similar to evaluating the above-mentioned notes, but I have not explored the important process in which the notes are produced, and neither have I directly investigated the interpretations that could occur in that stage. If participants visit a real patient with ADHD, the information they gather might be different from my vignette.

²¹ By ‘reference-knowledge’ I mean the knowledge, information and perceptions that the clinicians have previously obtained as ‘frame of reference’, in contrast to the knowledge/perceptions that clinicians obtain from the clients.

They might concentrate on different topics, ask different questions, and so gather different information.

However, considering this limitation, I explored the experience of participants by asking about the similarity of their clients to the person described in the vignette and their perception of such clients. In addition, I asked them based on their judgment, to what degree their response to the vignette might be different from real clients and how and why it might be different. Moreover, I have been cautious in the analysis of the resulting data and I appreciate that the vignette could not be interpreted as an absolute reflection of the real behaviours of clinicians. Morrell and Roland (1990), for example, could not find any relationship between the replies of general practitioners to case vignettes and their clinical decisions.

The other practical limitation that I anticipated was the low response rate problem, as Prof. Peter Conrad also mentioned regarding my proposal (personal correspondence, 09/09/2006):

“I’m also not sure what kind of response rate you will get sending a survey to clinical professionals (my sense is it might be very low)”

I attempted to enhance the response rate by making the vignette short and by making the research process very simple (answering only five questions). I also provided information and an explanation about the nature of the

research in my introductory letter. I also sent reminders, performed selected invitations and used advice letters as explained in section 3.6.

However, there are other unavoidable factors could affect this study's data. I evaluated only cooperative clinicians, who are probably more interested in the topic. In addition, participants' probable knowledge of my supervisors and I, or the school²² that I approached them from, could influence the replies towards or against specific items.

3.2 Participants of the study

3.2.1 Case Boundaries

A variety of clinicians could diagnose ADHD, including GPs, psychiatrists and psychologists, (National Institutes of Health, 1994). ADHD is supposed to be detected in primary care and then referred to mental health services (Parr et al., 2003). Therefore, I decided that these three groups of clinician would be the participants in my study.

Regarding the geographical boundaries, I took a practical decision, and as Nottinghamshire had an obvious advantage of accessibility, I limited my study to clinicians in Nottinghamshire.

²² School of Sociology and Social Policy

3.2.2 Method of case selection

As previously discussed, the population of my study consisted of GPs, psychiatrists and psychologists. After receiving ethical approval, I contacted 'Integral Services UK Ltd' a company associated with the Primary Care Trust (PCT). They provided the names and addresses of 673 GPs in the Nottinghamshire. The addresses were also available on the NHS²³ website.

I also contacted the Nottinghamshire Health Care NHS Trust and based on Freedom of Information, I obtained a list of 111 psychiatrists and 138 psychologists in Nottinghamshire. These lists were also available on the NHS website²⁴. However, these lists did not include academics that hold honorary contracts with the NHS, so my supervisor added 2 psychologists and 10 psychiatrists to the list, and the final numbers reached 140 psychologists and 121 psychiatrists.

In order to randomly select these cases, I numbered the lists, from one to 673, 140 and 121 in the list of GPs, psychologists and psychiatrists respectively. Then I used a random integer generator' from a website²⁵, and

²³ <http://www.nhs.uk/England/Doctors/MapSearch.aspx?RegionCode=5N8> accessed at 27/02/2007

²⁴ <http://www.nhs.uk/England/AuthoritiesTrusts/MentalHealth/showTrust.aspx?id=RHA> accessed at 06/03/2007

²⁵ www.random.org, accessed at 01/05/2007

produced random numbers and selected 150 clinicians from the lists (50 clinicians from each group).

3.2.3 Gaining Access

“External Stakeholders” (Murphy et al., 1992, p 162) of my study were the Primary Care Trust and Nottinghamshire Health Care NHS Trust and through them I gained access to participants. I contacted the Primary Care Trust and Nottinghamshire Health Care NHS Trust, after getting ethical approval and research governance, and I received their support for the research and access to participants. In addition, it is worth mentioning that I had an honorary contract for clinical attachment²⁶ that facilitated my contact with the Trusts.

3.2.4 Number of participants

The number of participants was not determined from the earlier stages of the study and was dependent upon the data obtained. Initially, I selected 150 clinicians (50 from each group), and sent the vignette to them. I then sent the reminders and the vignette to new clinicians until I received 44 replies that were distributed in categories of profession and sex. Then I selected my interview participants from the clinicians who answered my vignette-related

²⁶ The clinical attachment is with my supervisor Prof. Chris Hollis, for observing cases with ADHD. This opportunity was particularly useful in evaluating my vignette.

questions. My selection was based on theoretical considerations using participants with different views on the vignette, as I will explain in section 3.7.1. I considered the themes and issues that were discussed in the interviews and continued collecting data to the point that I found the main themes were repeating through the interviews. Therefore, my sample was based on emerging results (Silverman, 2005) and reached a total of 16 in-depth interviews.

3.3 Preparing the research tools

In this section, I explain how I designed the vignette, its related questions and interview guidelines.

3.3.1 The vignette

In designing the vignette, the first question was about the length of the written description. I contacted Dr Katerina Maniadaki and Professor Edmund Sonuga-Barke, who used vignettes in their study of ADHD (Maniadaki et al., 2005a, Maniadaki et al., 2005b) and enquired about the length of the vignettes they had used. In response, Prof. Sonuga-Barke mentioned:

“We felt the vignettes that we used were about the right length. They covered the pattern of symptoms but were not too overpowering. (Personal correspondence, 15/2/2006)”

They sent their vignettes to me, which were around 150 words length. Since they planned to use the vignettes to explore the idea of lay people, they applied brief vignettes. In another study, Dr Wakefield et al (2002) proposed exploring the judgment of clinicians and therefore their vignette was more lengthy. I contacted him and enquired about their vignettes. Dr Wakefield sent me their vignette that was around 320 words long and he stated that:

“I do not think there is any hard and fast rule here; the question is whether the subject can take in the information and use it effectively. (Personal correspondence, 15/2/2006)”

The other question was whether I have to use one or more vignettes. Maniadaki et al (2005a, , 2005b) and Wakefield et al (2002) applied different vignettes, because they intended to compare particular factors that may have influenced the opinion or judgment of participants. However, as I intended to explore variation in the perception and approach of clinicians, I needed only one type of vignette. In addition, if I used different vignettes, this would create some practical difficulties. If I sent all the different vignettes together

to all clinicians, this would make their task more time-consuming and potentially lower the response rate. If I sent different vignettes to different clinicians, then this issue could cause variation in the replies that could interfere with the aim of my research. Other researchers have also used unique vignettes, for example Everitt, et al. (1990) used a unique vignette of a patient to explore approach of clinicians to the symptoms of insomnia in a quantitative study.

The next question was about the quality of description of an adult with signs and symptoms of ADHD. Such a description was best available in the Utah Criteria (UC; see Appendix A) (Wender, 1995), which could also be compatible with DSM-IV-TR, and its validity has been evaluated scientifically (Wender et al., 1985, Searight et al., 2000, Shekim et al., 1990).

In the following sections, I describe my rationale for selecting different parts of the vignette in detail.

Firstly, in order to make the vignette live and readable, I selected the common name of John for the case. As the UC requires a childhood history of ADHD, I added this point to the vignette. As illustrated in chapter 2, comorbidities are quite common in ADHD patients, so I added some descriptions of addictive disorders (Coombs, 2004). The UC excludes the diagnosis of ADHD for patients with some comorbidities such as major depression and psychosis (Wender, 1995). However, items that I added to the vignette were not among the signs and symptoms of those conditions.

Therefore, by adding those characters to the vignette, I made no barrier to diagnosing ADHD.

As ADHD could be seen in parents of ADHD patients, I considered John's father as an undiagnosed ADHD case and described him as somebody who has changed his job several times. This is a common characteristic in the lives of people with ADHD (Wender et al., 2001). In addition, alcoholism and ADHD are highly related (Wender et al., 2001), so I added that to the characteristics of John's father. It should be remembered that although drug addiction and alcoholism are highly related to ADHD, and I mention a history of cannabis use for John, I intentionally avoided mentioning present drug or alcohol history. If I did mention such a problem, it might lead to ADHD and all other explanatory diagnoses being overlooked.

In order to make sure of the accuracy and acceptability of the vignette, I explored profiles of some adolescents with a diagnosis of ADHD in Nottingham²⁷ and found that my descriptions were comparable to their life histories. There was only one point: I initially mentioned the history of cocaine abuse, but after reading real histories, I found cannabis to be more popular in those patients, so I changed cocaine to cannabis.

I selected the age of 22 for John to indicate that he is an adult. Adult ADHD patients might avoid concentration problems if they are in jobs that do not demand high concentration (Wender, 1995). Therefore, I introduced him

²⁷ I accessed the patients' profiles through my honorary contract with NHS.

as a university student that legitimated his complaints of lack of concentration as one of the main symptoms of ADHD. Finally, the other point in the vignette was mentioning help seeking. In order to avoid the suggestion of the existence of a medical problem, I specified that he has asked for help from his university support centre, rather than a medical centre (see 'the vignette' in Appendix B).

3.3.2 The vignette-related questions

I designed the vignette-related questions based on my research questions and the key elements in existing views of ADHD (section 2.2.4). I asked about the way in which participants perceived and would like to approach the vignette, and for their ideas on the professionals groups responsible, and on similar clients that they have visited.

As I wanted to avoid framing replies and constraining the possible responses given, I did not use multiple-choice questions. In addition, I avoided suggesting the existence of a medical/psychiatric problem in the questions. For example, I asked about the 'problem' of John, instead of his 'diagnosis' (see 'the vignette' in Appendix B).

3.3.3 The interview guideline

I developed an interview guideline, and I considered the importance of establishing rapport with participants in it. Therefore, I decided to start the

interviews by reminding them of basic information regarding the research, and thanking them for participating. Then I considered five questions that could address my research questions (see 'the interview guideline' in Appendix B).

However, the questions that I considered for the interviews were developing over time, and I incorporated points that I found relevant and important in one interview, in later ones. Therefore, I revisited the themes and questions during the study and added points, such as following items, to my interview agenda:

Professional background and work setting: After initial interviews, as I noticed the potential importance of professional background such as the educational degree and work setting of the clinicians that informs the type of patients they usually visit, I asked for this information at the beginning of other interviews.

The typical case: I noticed that participants might have particular perceptions of ADHD, so I checked the cognitive set, schema or image that participants had of an adult with ADHD.

Treatment preference: I had the idea that some attitudes of participants towards treatment could influence their approach towards the diagnosis. In

addition, I checked the awareness of participants for knowledge of specialist places for referring ADHD patients.

3.4 Obtaining approvals

Participants in my research were clinicians, and my research did not involve children or vulnerable adults and there was no need to chaperone participants or myself. This study did not pose any physical, psychological, social or emotional danger, risk, distress, or adverse effects that were greater than the normal lifestyle of the participants or me. My study was not offensive for participants, and I did not gather any data without their permission. All collected data were in locked storage places in university or password-protected computers. The only papers that included the participant's name were consent forms that were kept in the locked storage cupboards. Other papers, including answer sheets and interview transcripts, included only ID numbers. I offered the participants an opportunity to provide comments prior to publication.

I preserved the anonymity of the participants during the analysis and reporting and introduced them by their ID, age and profession throughout this dissertation. I initially included sex of the participants as well; however, I deleted it later for two reasons. Firstly, my analysis did not confirm any

difference between position of male and female participants²⁸. Secondly, I was concerned that participants could be identified by potential readers who might be familiar with the clinicians in the Nottinghamshire.

I prepared introductory letters that introduced me and the aim of my research ensuring participants that I would use their answers for my PhD research only, would keep their data confidential and would not refer to them in an identifiable manner. I had also offered them the right to withdraw their data from the research at any time. Finally, in order in appreciation of their participation in my research, I had offered to inform them of the results of the research and its publications (see 'the introductory letter and information sheet' in Appendix B). I also prepared a consent form that enabled participants to indicate their agreement to being approached for interviews (see 'the consent form' in Appendix B).

In order to obtain ethical clearance for this study, according to Local Research Committee (LREC) Application & Trust Research and Development (R&D) Approval Information Guide²⁹, I took the following steps:

As my research involved NHS staff, I required LREC approval and R&D Management approval from both Health Care Trust and Primary Care Trust. I

²⁸ I did not find role of sex in the accounts of participants and also I used demographic data of participants and checked the role of sex in perception and approach of the participants and did not found any statistical significant difference between male and female participants.

²⁹ Available at: www.nottingham.ac.uk/nursing/research/ethics-rd-nottspct.doc accessed at 10/08/06.

found relevant guidance for submission of my research at the web site of The National Research Ethics Service of NHS³⁰.

I studied 'Research Governance Framework for Health & Social Care'³¹. This document tells of the responsibilities and standards that must be applied to any research within NHS, including student research projects. I needed to complete two peer-reviews. My supervisor, Prof Justine Schneider, and Prof. Robert Dingwall, the external reviewer, reviewed and confirmed my research proposal.

Since there were NHS reorganizations at the time of my request, the process of getting approvals became exceptionally lengthy and required considerable perseverance. It took eight months from the date that I submitted my documents for the ethical committee until I received the final R&D approval (see Appendix C).

3.5 The pilot study

I recruited two participants in order to perform a pilot study and investigated the necessary modifications in the vignette, its related questions and the interview guideline. The participants were two PhD students in the School of

³⁰ www.corec.org.uk accessed at 10/08/06.

³¹ Available at: <http://www.dh.gov.uk/PolicyAndGuidance/ResearchAndDevelopment/ResearchAndDevelopmentAZ/ResearchGovernance/fs/en> accessed at 10/08/06.

Sociology and Social Policy, with graduate psychology degrees. They replied to the vignette, and then I interviewed both of them and transcribed one of the interviews. I found the whole process of data collection working well, although I made slight changes in the vignette and its questions, based on the comments of the participants. I also presented the vignette to two professionals in the Centre for English Language Education (CELE) at the University of Nottingham, and corrected the text of the vignette and its questions based on comments on grammatical points and general English use.

3.6 Application of the vignette

3.6.1 Sending the vignette

In August 2007, I posted 150 packages to randomly selected clinicians' that included:

- The vignette
- The answer sheet that included vignette-related open-ended questions and demographic questions
- Invitation letter/information sheet that introduced me, the research and all related processes
- The consent form
- A stamped self-addressed envelope for return of the completed questionnaire

The expected task for participants was to read the vignette and answer the related questions. I received 25 in return which included 18 replies (see 'Feedback to the vignette' in Appendix D).

3.6.2 Sending reminder to reply to the vignette

After receiving replies to the first sending of the vignette, I decided to send a reminder to 125 selected clinicians, who provided no feedback. In order to increase the response rate, I added an advice letter from Dr Peter Miller, the medical director of Nottinghamshire Healthcare NHS Trust³². I requested and received the approval of the ethical committee for adding the advice letter.

Therefore, in November 2007, I sent the packages, which included the advice letter as well, to 125 participants. I received 17 by return which included 10 replies (see 'Feedback to the reminder to reply to the vignette' in Appendix D).

3.6.3 Selected invitations to reply to the vignette

By sending the vignette and the reminder, I received 28 replies to the vignette-related questions, which included only four replies from GPs. Therefore, I decided to send the vignette to a group of GPs. I applied for and received ethical approval to invite non-randomly selected clinicians. I asked

³² Thanks to Professor Hugh Middleton, who is both associate professor of the School of Sociology and Social Policy and a NHS consultant psychiatrist.

Prof. Tony Avery, Head of the Division of primary care in the school of community health sciences in Nottingham to provide me with named advice letters to GPs who were teaching for the division. He provided me with the addresses and named letters of 27 GPs and I sent packages to them; I received 15 replies.

Finally, in some of the interviews, the respondents referred to one particular psychiatrist as an expert in the field. Therefore, I sent the vignette to that clinician and received the reply (see 'Feedback to selected invitations to reply to the vignette' in Appendix D).

3.6.4 Managing and recording the actions

I created a list using SPSS software that enabled me to keep a record of actions taken in relation to each case. Having this list facilitated identifying those clinicians, who agreed to be interviewed and those who neither replied nor sent an apology (see 'Total received replies to the vignette' in Appendix D).

3.6.5 Processing the data

After receiving replies to the vignette-related questions, I typed the answers and inserted the resulting data into an Nvivo file that I produced for analysis. I explained it in detail in section 3.8.4.

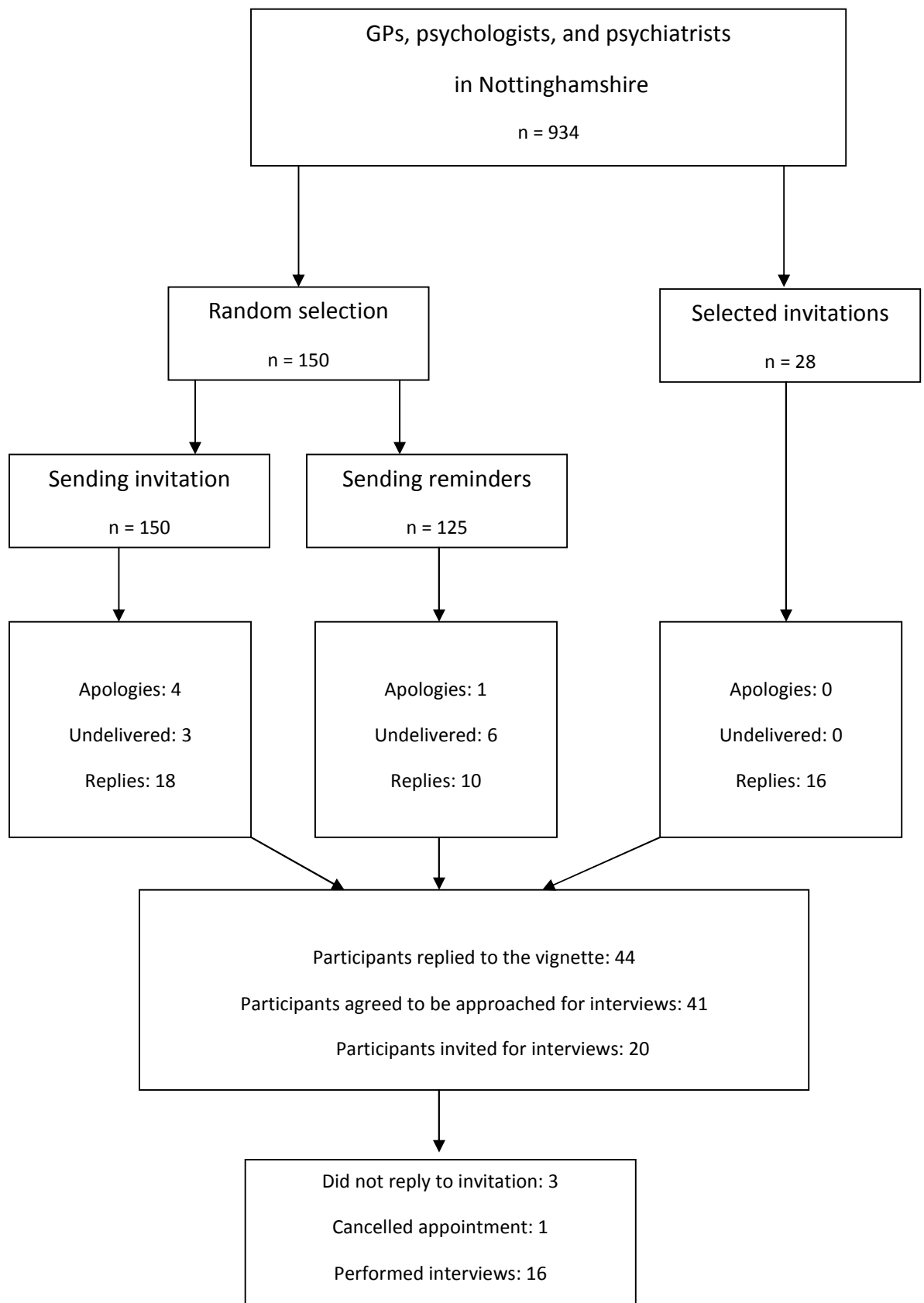
3.7 Performing the interviews

3.7.1 Invitation to interview

In order to select participants for interviews following the first part of the study, I made a theoretical choice and selected participants who illustrated variation in their perceptions. My choice consisted of participants who had different points of view, because these cases might help to illustrate the issues and concepts related to this study (Silverman, 2005). I also considered their professional group and invited participants from different professional groups (see 'Total performed interviews' in Appendix E).

In order to invite selected respondents, initially I used email. I thanked participants for their participation and for allowing me to approach them for an interview. Then I informed them that their reply was interesting and asked a date and time for the interview. I also recommended that the interview could take place over the phone. I attached the vignette, the scanned answer sheet and the typed reply to my email as reminders. For those respondents who did not provide their email address or did not reply to my emails, I used fax for communication. Three participants did not reply to further correspondence and one did not attend the agreed appointment. Finally, I found the emerging themes being repeated after performing sixteen interviews. The following consort diagram illustrates the process of sample identification, which I explain in sections 3.6 and 3.7.

Figure 3.1 Consort diagram of sample identification



3.7.2 Method of interviewing

I tried to undertake face-to-face interviews, but three participants preferred phone interviews and two participants moved from Nottinghamshire to other parts of the UK, so I performed five out of the 16 interviews over the phone.

Before I started the interviews, I made sure that participants had access to their reply to the vignette-related questions. To do this, I brought the vignette and the answer sheet, both the original one with their handwriting and the one that I typed, with me to the interview session. For the phone interviews, I sent the documents by email one hour before the session.

During the interviews, I prompted a question that was followed by further questions. Sometimes, I asked the extra questions at the same time and, on some occasions, came back to the topic later on during the interview. This was especially relevant where the respondents stated another point that was similar, related or contradicted with an earlier point.

At the end of the interviews, I asked the respondents whether they wanted to add any points, let them know that their answers and cooperation had been helpful for me and thanked them again.

During the conversations, I tried to demonstrate my interest and created an atmosphere to encourage the respondents, however, I was vigilant not to bias the answers. The style of interviews varied according to the respondent's performance and the interview situation. For example, in the

phone interviews, the respondents usually provided shorter replies, and I needed to prompt the conversation with more questions. This situation could be due to the nature of telephone interviews that rely on oral communications where emotions were delivered through “tone of voice, speech style and speed of response” (Keats, 2000, p13).

3.7.3 Recording the interviews

I recorded³³ the interviews on 90-minute tapes. I used each side of the tape for one interview only. I found it helpful to use an external microphone, because I could place the microphone close to the interviewee, while keeping the tape recorder near myself. I kept eye contact with the respondent, and checked the recorder at suitable times, for example, when s/he was reading the vignette. In the early sessions, I used a digital voice recorder³⁴ in combination with the tape recorder for peace of mind. I recorded the interviews that were over the phone on normal 90-minute tapes using a telephone conversation recorder³⁵.

I stopped recording if the interviewee intended to talk to somebody else, for example over his/her phone, and then restarted the recording as soon as s/he was ready again. I started recording again only after getting permission from them. This was particularly relevant during the phone

³³ Sony TCM-450DV cassette recorder

³⁴ Creative ® mp3 player

³⁵ Re-Tell ®

interviews, as the respondents did not see the recordings and needed to be informed. At the end of the interviews, when I thanked the respondents and asked them if they wanted to add anything else, I kept recording until I made sure there would be no more relevant conversation. Sometimes, at the end of the interviews, the respondents started to talk on something interesting, and then I got their permission again and restarted the recorder.

I had a pen and paper ready during the interviews, but in order to keep eye contact and maintain the flow of the conversation, I did not use it, unless the respondent mentioned something special, such as a specific name. After the interviews, at the first opportunity that I could find, for example, when I came back to my car in the hospital car park, I wrote memos on what I found to be important and interesting in the interview. Those field notes and memos were helpful in modifying the interview guideline, developing codes and analyzing the interview transcripts.

3.7.4 Transcribing the interviews

I transcribed all interviews in full³⁶ and typed the interviews directly. After finishing each transcription, I listened to the whole tape again to check the accuracy of the transcription. Whilst transcribing, I typed my own interpretation and analytical points as a comment or footnote in the transcription file. I named the files according to the ID of the participants,

³⁶ Using Sanyo, TRC-8080 machine

saved back-ups frequently and kept them in different safe places. The total 16 interview transcripts constituted 91,251 words.

3.8 Analyzing data

The data that I produced consisted of the answers of participants to the vignette-related questions and the transcription of semi-structured interview conversations. Collected data were interpreted and explored using NVIVO software. The analytical approach was thematic/framework analysis in two parts. In the first part, I explored mainly the variations that existed in the perception of participants. In the second part, an in-depth understanding of the relationship of participants to the underlying factors of those variations and their perception of the situation was the aim of the analysis.

I selected the analytic method according to my research questions and method; and therefore used various methods (Malterud, 2001, p 486):

- ‘Theory-based analysis style’: I organised my data according to pre-existing categories related to the literature and my research questions;
- ‘Grounded theory’: I looked for emerging categories and concepts and with a ‘Data-based analysis style’, in Chapters 4, 5 and 6, I identified units in my interview and questionnaire data to develop categories and understand the data through them;

- ‘Crystallisation analysis style’: in chapter 6, I considered the whole text of each interview and then crystallised the most important aspects of it.

In my analysis, unlike the linguistic traditions (such as narrative analysis, conservation or discourse analysis), text was not the object of analysis and a window to human experience (Ryan and Bernard, 2000). However, my analytic method was influenced by the type of text that I had. I obtained two forms of text in this study: words and phrases and free flowing texts (Ryan and Bernard, 2000).

I obtained words and phrases via open-ended questions in the first part of this research. I analyzed these kinds of data using lists and tried to identify items that were related together and to a concept (Ryan and Bernard, 2000). I used lists in Chapter 4, to categorize the replies of participants in relation to different aspects such as different diagnoses or treatment options.

I obtained free flowing texts through both interviews and open-ended questions. I analyzed these data by reduction to words or by coding that includes the identification of themes, building codebooks, marking texts, and constructing models (Ryan and Bernard, 2000).

I identified themes by literature review, based on my experience, and field notes and memos (Ryan and Bernard, 2000). I also adopted a grounded-theory approach, in which the categories and concepts emerged from the text (Glaser, 2002). Therefore, the process of identification of the themes started prior to the data collection and continued through it and during analysis

phase. I built a codebook to facilitate analysis and coding, and marked text by reading it, identifying and attributing themes to it, and identifying new themes at the same time.

Finally, in order to explain research findings, in an ongoing procedure, I constructed a model, by relating the themes. I also looked for items in my data that could disconfirm the emerging model, before achieving the final model; testing the model was an important part of the process.

I used QSR Nvivo³⁷ for analysis of my data. In my Nvivo file, I imported my data of 44 replies to the questionnaire, 16 interview transcripts. I then defined codes (pre-determined or emerging categories) and attributes (such as age, sex, professional group, and educational degrees of participants). I also used 'query' option to search for specific items whenever necessary. In addition, I produced matrices to cross-tabulate findings in chapter 4.

I will provide more explanations on the analysis at the following chapters.

³⁷ Versions 7.0.274.0 SP3 and 8

Chapter 4 : Observed variations in participants' responses

In this chapter, I will discuss the data that I have collected through the questionnaires. My aim is to identify variation in the data.

4.1 Variations in the participants' perception and approach

I explored all 44 replies to the vignette-related questions, and produced four lists based on the key elements of existing views towards ADHD (see section 2.2.4), which were questioned in the vignette-related questions (See the 'the vignette' in Appendix B). The following sections present and discuss the most relevant findings of the analysis.

4.1.1 Variation in the participants' perception and approach regarding the main problem (diagnosis)

The first list represented issues that the participants mentioned to explain John's problem. Although less than half of the participants used ADHD to explain John's condition, ADHD was still the most commonly used item. In addition to ADHD, there had been a variety of suggestions, which I have also classified and analysed.

Some of the participants referred to the main signs and symptoms of ADHD to explain John's condition. According to the UC, seven major groups of symptom are found in adult ADHD patients (Wender, 1995). These symptoms include attention difficulties, persistent hyperactivity, mood instability, disorganization, hot temper, emotional over-reactivity and impulsivity. I found that some participants have directly referred to impulsivity, attention problems, disorganization, and emotional instability.

In addition, some of the participants referred to other psychiatric disorders that have similar symptoms to adult ADHD. Wender (2000) suggested that these psychiatric problems "may occur with adult ADHD, may mask it, or be misdiagnosed as ADHD" (p 263). He then suggested a list that includes anxiety disorders, bipolar mood disorders, unipolar depression and personality disorders (ibid`, p 264). Participants in this study have suggested all those psychiatric disorders for John's diagnosis.

There are also some other issues that are introduced in the Utah criteria as 'features often associated with ADHD' that include marital instability, academic and vocational failure, substance use, histories of ADHD (ibid, p 263). These are neither symptoms of ADHD, nor independent psychiatric diagnosis. They are considered to be either caused by the condition or associated with its causation.

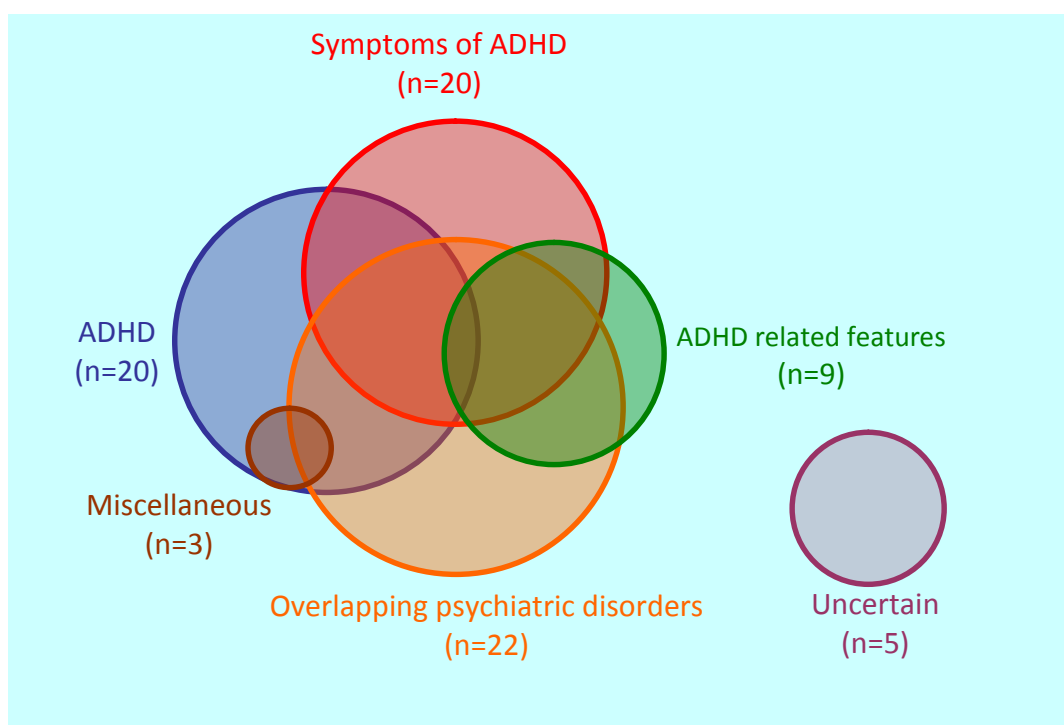
Three participants suggested items that were not within above categories, including autistic disorder, Asperger, and psychosis.

The next question is related to the remaining participants who did not fall into any of the above-mentioned groups. Therefore, I explored all the replies and found five participants indicated that their uncertainty, either by referring to the impossibility of answering to the vignette or by failing to answer the question. For example, participant 140 (42 years old, psychiatrist) suggested that John "*must identify his own problem*". Another example is participant 160 (50 years old, GP), who referred to "*normal growing up*", but at the same time answered other questions in a way that suggested the existence of a behavioural-psychological problem, for example by proposing treatments. Therefore, in light of those answers, I categorized that response as uncertainty for the main problem and not as a normalizing approach.

Therefore, in the first list related to the main problem (diagnosis), I classified the ideas of the majority of the participants regarding John's main problem into overlapping groups and accordingly produced the following independent codes: "ADHD, symptoms of ADHD, overlapping psychiatric disorders, ADHD related features, miscellaneous, and uncertain ". Results are presented in the following chart.

As each participant has referred to different items, there have been some overlaps between different categories. The following Venn diagram (Figure 4.1) is a qualitative illustration for existence of overlaps between the four main categories of the suggested problems (ADHD, 'symptoms of ADHD', 'ADHD related features', and 'overlapping psychiatric disorders'). In addition, it indicates that in three occasions that miscellaneous items were suggested, they were mentioned along with ADHD and 'overlapping psychiatric disorders'; and finally, those replies that were classified as 'uncertain' did not overlap with any other groups. Although the illustration is qualitative, the size of each disk is related to the number of suggested items in each corresponding category.

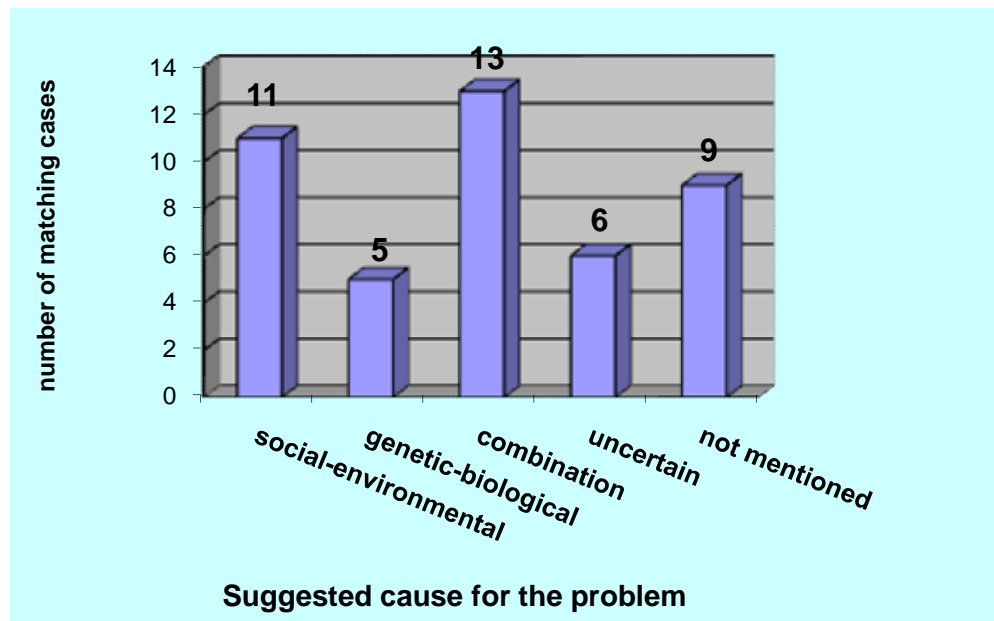
Figure 4.1 Diagram of suggested items as the main problem (diagnosis) of 'John'.



4.1.2 Variation in the participants' perception and approach regarding the cause of the problem (aetiology)

The second list contains issues that 44 participants mentioned to explain the probable cause of John's problem. I classified items in the list into four categories: social-environmental factors, genetic-biological factors, a combination of both, and a fourth group related to participants who indicated uncertainty towards the issue. Therefore, in order to investigate the distribution of different opinions on causes of the condition, I developed a code with four alternatives of "social-environmental, genetic-biological, combination, and uncertain" and explored all replies again. The results are summarized in the following chart:

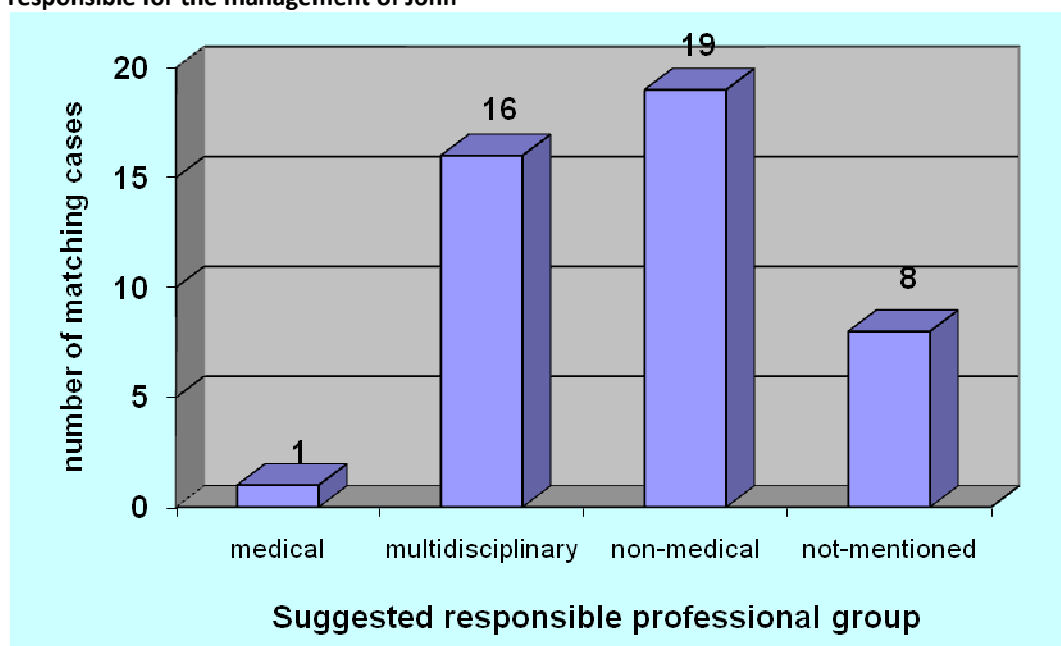
Figure 4.2 Categorization of opinions of participants on causation of John's problems



4.1.3 Variation in the participants' perception and approach regarding appropriate professional group

The third list indicates the professional group that the participants have introduced to be appropriate for dealing with John's problem. I categorised items in this list into four different groups of participants who suggested non-medical professionals, psychiatric and medical professionals, and multidisciplinary approaches. In addition to those participants who directly mentioned multidisciplinary approaches, some others suggested the same idea by mentioning different professionals at the same time. So in order to investigate it in the data, I produced a code with four alternatives of 'medical, non-medical, multidisciplinary and not-mentioned' and analysed all replies accordingly. The results are illustrated in the following chart.

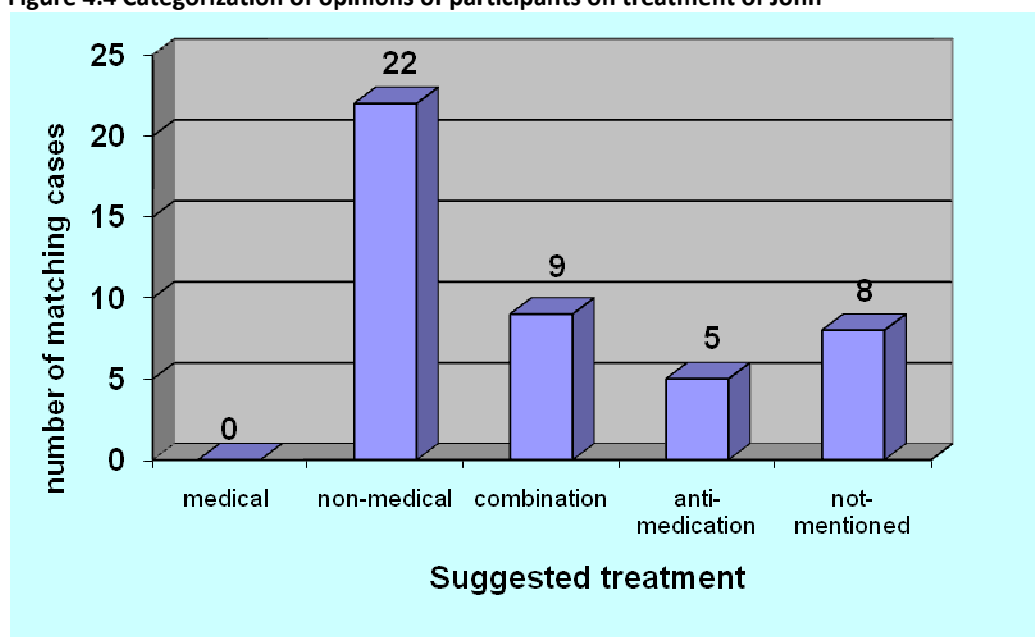
Figure 4.3 Categorization of opinions of participants on the appropriate professional group responsible for the management of John



4.1.4 Variation in the participants' perception and approach regarding treatment

Finally, the fourth list indicates the sort of treatment that the participants suggested for dealing with John's problem, and the data demonstrate that the participants suggested a variety of approaches. Considering the importance of drug therapy (see section 2.4.4), I classified those replies according to their approach towards drug therapy, as medical-psychiatric treatments, non-medical treatments, and a combination of treatments. It is also remarkable that some participants directly rejected drug therapies. Therefore, I defined a code with alternatives of "medical, non-medical, combination, and anti-medication" and explored all replies again. The following chart illustrates the results.

Figure 4.4 Categorization of opinions of participants on treatment of John



4.2 Categorization of participants

In section 4.1, I illustrated variations in participants' replies towards different aspects of the vignette and classified them into categories. In this section, I am going to categorize participants based on their general perception and approach towards ADHD.

Participants fell into three patterns. In the first pattern, participants suggested ADHD for the vignette. The participants diagnosed John as ADHD, and their replies were consistent with the medical model of ADHD. For example, participant 024 (39 years old, GP), suggested 'ongoing ADHD' as John's main problem, which is 'probably' caused by 'genetic'. S/he suggested referring John to receive 'medication' or 'psychological therapies'.

The second pattern consists of participants who have not mentioned ADHD at all. For example, participant 012 (29 years old GP), mentioned 'personality disorder', as John's main problem, which is shaped by 'early life experiences' and to solve the condition s/he suggested to 'give counselling a try'.

The third category is related to participants who are in between. For example, they might consider the diagnosis of ADHD, but indicate strong uncertainties towards other aspects of the medical model, such as drug therapy. For example, participant 044 (36 years old, GP) suggested that John 'is likely to have a diagnosis of adult ADHD or personality disorder'. However,

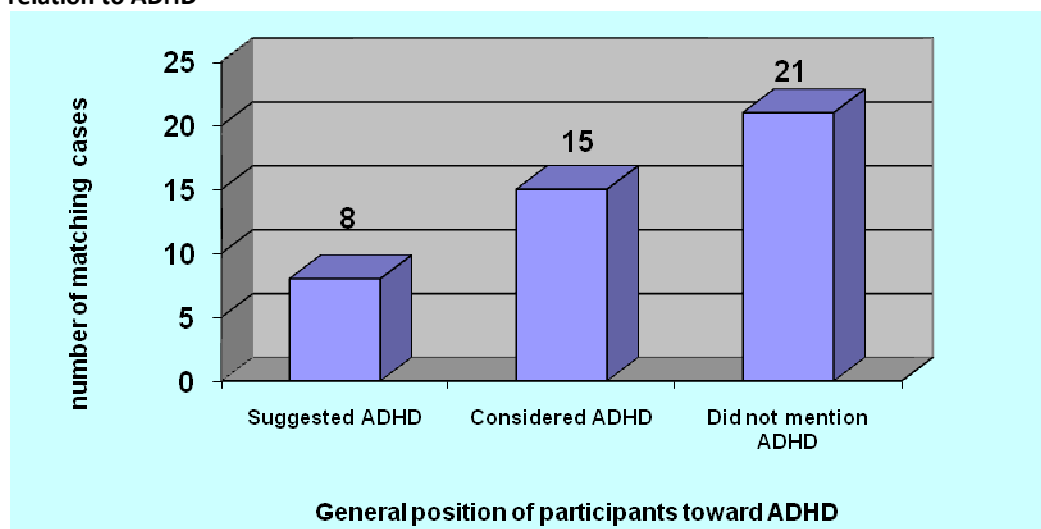
s/he differentiate his/her position of the medical model by describing the way s/he would respond to John's problem as 'support without medicalizing (no drugs) '. In some other cases, the participants did not directly referred to ADHD, but considered application of Ritalin, the drug used for treatment of ADHD. In other cases, participants mentioned ADHD, but without suggesting it for John. For example, participant 112 (50 years old, forensic psychiatrist) explained the main problem of John as 'underlying psychological and/or emotional issues regarding his childhood and self-identity' and suggested that 'John does not require psychiatric or medical treatment'. However, at the end of his/her reply, s/he stated that 'the vignette highlights the difficulty in making an accurate diagnosis regarding his condition (ADHD) '. Finally, some participants suggested ADHD along with some other diagnosis, yet without giving any priority to ADHD. For example, participant 113 (43 years old, psychiatrist), replied to the question on John's main problem as:

'Numerous diagnoses are possible including: (1) Bipolar Affective Disorder (2) Adult ADHD, (3) Borderline P.D. or traits. (4) Anxiety Disorders (5) Undisclosed substance misuse. Also may not meet criteria for formal ψ Diagnosis & is simply a young man with difficulties / financial / social problem'. S/he suggested that answers of other questions 'depends upon 1st Diagnosis'. And stated that 'V. Difficult to give only one Diagnosis'.

Because of these different patterns, I re-evaluated all 44 responses and found that 8 participants (18%) could be placed in the category of 'suggested ADHD', 15 (34%) in 'considered ADHD' and 21 (47%) in 'did not

mention ADHD' (see the table of general classification of the participants in Appendix D). This result is illustrated in the following chart.

Figure 4.5 Exploring variations in the overall position of participants towards John in relation to ADHD



The finding implies that almost half of the participants did not suggest or consider ADHD at all in their replies. The number of those who seriously indicate the application of the label is a small fraction of participants.

It is notable that during the interviews, two participants³⁸ mentioned that they misread the vignette. Therefore, I categorized these two participants based on their later position. In other occasions, I found out there is no difference between positions of participants when they replied the vignette and when participated in the interviews.

³⁸ Participants 095 and 117

4.3 Discussion

In this chapter, I addressed my first research question, which was concerned with the existence of variation in the participants' perception and approach towards adults with signs and symptoms of ADHD. By considering key elements discussed in section 2.2.4, I analysed my data and classified the wide range of answers into three to five groups, for each element.

Regarding the different diagnosis given by participants to the main problem of the case in the vignette (section 4.1.1); it is notable that only 20 participants (45%) referred to ADHD. Other participants picked up other diagnoses or conditions, despite the fact that I mentioned current signs and symptoms of ADHD, history of ADHD and its successful treatment in childhood.

The variety in the offered diagnoses indicates that the situation is not biphasic, containing only options of suggesting ADHD, or not suggesting it; instead, the study suggests that the situation includes suggesting ADHD and/or suggesting many different items. On the one hand, there was not overall agreement on the diagnosis of ADHD for 'John'; on the other hand, there was an almost total agreement on problematisation of the characteristics of him. This point is important in the assessment of the degree

of medicalization of a phenomenon. I will discuss this aspect further in chapter 7.

By considering the opinions of participants on the causation of problems of the case in the vignette (section 4.1.2), it is notable that 18 participants (41%) suggested genetic-biological or combination sources, which are compatible with the medical model of ADHD. In contrast, 11 participants (25%) suggested only social-environmental causes, which is more close to anti-psychiatry views. In addition, considerable amount of participants (15 participants, 34%) did not answer this question or indicated their uncertainty towards it.

Another sort of variation in answers was related to participants' opinion regarding professional group appropriate for treatment and management of the case in the vignette. The results indicate that among participants who suggested medical professionals ($n = 17$, 39%), almost all of them offered it along with other professional groups and suggested multidisciplinary approach. This indicates that participants did not consider medical therapy as the only approach to the condition. This conclusion could refer to participants' account of acceptable approaches, but does not necessarily reflect their practice. In addition, 19 participants (43%) suggested only non-medical professionals for dealing with the problem, which is a different position from the medical model of ADHD.

I explored the relation of opinion of the participants on causation and appropriate professional groups in the matrix one (see 'matrix one' in

Appendix D). It is notable that there is a considerable relationship between participants' views on causation and the professional group: Most of the participants who suggested a combination of factors to explain causation have also suggested a multidisciplinary approach (9 out of 13); and most of those who suggested socio-environmental factors, have recommended non-medical professional groups for treatment (8 out of 11). However, this relationship is not conclusive in all cases: two participants who suggested a genetic-biological basis for the condition and two participants who suggested a combination of causes recommended non-medical professional groups.

It is also worth noting that participants who were uncertain about the cause, did not recommended any medical professional groups, not even in combination with other groups, and mostly recommended non-medical professional groups (4 out of 6). This might indicate the importance of 'beliefs' in the existence of medical-biological basis in legitimising medical management. However, it is notable that participants who suggest a genetic-biological basis for the condition did not suggest a treatment by medical professional groups alone and instead recommended involvement of multidisciplinary professional groups (3 out of 5). This again supports the acceptability of multidisciplinary and non-medical approaches, in contrast to medical ones.

Finally, I explored the variation in participants' opinions regarding the treatment of the case in the vignette (section 4.1.4). I approached clinicians in this research, whose role suggested that they are likely to work based on the

medical model, which suggest drug treatment as the main treatment of ADHD (see section 2.2.1); however, It was remarkable that none of the participants referred to medical treatments alone, and even five participants (11%) declared direct disagreement with drug therapy for 'John', therefore their positions were closer to anti-psychiatric/sociological views. Nine participants (20%), who suggested medical treatment, offered that option in conjunction with non-medical options. Half of the participants (22 participants, 50%) recommended only non-medical treatments. Therefore, regarding treatment, participants displayed the most deviation from the medical model of ADHD.

I explored the relationship of participants' opinion on treatment, causation and appropriate professional group in matrixes two and three (see Appendix D).

In matrix two, type of opinion on causation appeared to be associated with suggested treatments: participants who suggested social-environmental factors for causation, mainly supported non-medical treatments (9 out of 11) and did not recommend medical treatment even in combination with other approaches. However, participants who suggested a combination of factors mainly suggested non-medical treatments (7 out of 13) and participants who favoured genetic-biological causation either recommended medical treatments in combination with other methods (3 out of 5) or suggested non-medical treatments (2 out of 5). This might be resulted from concerns over drug therapy and reduction of participants who support this option. Participants who suggested medical treatment (in combination with other

approaches), mainly believed the condition to be caused by genetic-biological factors alone or in combination with social factors (5 out of 8).

Exploring the relationship of participants' opinion on treatment and appropriate professional groups (matrix three) indicates that participants who suggested non-medical treatments mainly recommended non-medical professionals (12 out of 22). The majority of those participants suggested a combination of treatments also recommended multidisciplinary teams (7 out of 9); and the majority of participants who directly rejected medication suggested non-medical professionals (4 out of 5). It is notable that participants who referred to multidisciplinary teams preferred non-medical or anti-medication treatments in a considerable proportion (7 out of 16).

While I have referred to numbers and percentages to illustrate observed trends in data, I am aware of limitations of my data. I explored the idea of clinicians over a vignette, which is not an equal phenomenon to doctor-patient interaction; and real performance of the clinicians for this reason could be different in real settings (see section 3.1.5). For that reason, even if I had an ideal sample size and quality, I would have limitations to generalize the observed attitudes to real practices. For example, although 52% of participants considered or suggested ADHD, those participants might perceive a real 'John' differently and do not suggest ADHD for him. On the other hand, initially it seems unlikely that participants, who did not mention ADHD for the vignette (48%), suggest it for real patients; because they did not mention it, even when they had the necessary written 'information'.

However, potentially it is possible that those clinicians rely on their visual memory or 'corporal wisdom' (Leder, 1990) and find the appearance of a real 'John' to be similar to their reference-image of an ADHD patient. Therefore, although findings of this research are suggesting trends and providing better understandings, statistical generalization of the observations is unreliable.

It is also notable that various views that were suggested inform possible competing conceptual frameworks, which were supposed in the third research question. In addition, I observed contribution of uncertainty in the resulted variation as I proposed in the fifth research question.

I will discuss more on the importance and implication of these findings in chapter 7, however, before that, I will analyze underlying factors for the existence of such a variation, in the chapters 5 and 6.

Chapter 5 : Subjective accounts of the participants

5.1 introduction

In the previous chapter, I analyzed and presented the replies to the vignette-related questions. As illustrated in the chapter 4, I found considerable variations in the participants' perception and approach. In this chapter, I will illustrate how the participants themselves perceived such a variation.

In a first step, I have explored interview transcripts to check whether participants have observed variation in the perception of clinicians. In the following sections, I have investigated participants' ideas about the importance and underlying causes of probable variation.

5.2 Existence of variation

The topics discussed with participants during the interviews varied, depending on the replies the participants provided to the vignette-related questions and the flow of conversations. However, one of the issues discussed in most interviews was the fact that I had received different opinions on the vignette (section 4.1). All participants confirmed the possibility of variation in clinicians' perception and approach, and they also provided different types of justifications for it. In addition, in twelve

interviews, the participants mentioned that they had observed variation in diagnosis of mental health problems in real psychiatric settings, for example, Participant 117 (67 years old, psychiatrist) emphasized:

“Of course, all the time, every day, the disagreement about how to understand, how to approach, even about diagnosis... rare that psychiatrists really agree”.

Participant 095 (43 years old, psychologist) also mentioned his/her experience in this regard and explained that the existence of variation is also known to legal bodies:

“Looking at the medical notes for patients who eventually come to us, who’ve been in other services, it’s very common for individuals to have had a series of different diagnoses, rare for an individual to be understood in one particular way ... that’s a quite common thing and often there’d be three or four psychiatrists asked to go to a court hearing to give evidence, because there isn’t agreement about the actual diagnosis”.

In addition to these examples, participant 117 (67 years old, psychiatrist) reported a situation in which three clinicians independently evaluated the same client and came up with different views:

“Many years ago, there was a large meeting of (...³⁹), where a psychoanalyst saw a patient, a behaviour therapist, (...⁴⁰), saw the same patient and I, as the family therapist, saw the family. We all came, we all presented our findings to the meeting, and then they were very different ... In other words, we bring as much baggage to the consultation as the patient brings and very often the conclusion of the consultation would be as much influenced by the psychiatrists’ perception as well as the patient’s problem”.

Finally, the other point that I came across it was the extent of observing and experiencing the variation is dependent on the health care setting and the number of clinicians who might visit the same patient. For example, if a patient is visited by one clinician only, it would not be disclosed that the patient could potentially receive different diagnosis and treatment, if visited by others. Participant 018 (47 years old, GP) has the experience of working in another country, with a shortage of psychiatrists. That participant explained that s/he did not experience variance in that situation, because:

³⁹ Name is deleted

⁴⁰ Name is deleted

“We never used psychiatrists. So we probably didn’t have anyone to argue with”.

5.3 Importance of variation

According to the data discussed in the previous section, participants confirmed the possibility of variation in diagnosis and treatment of psychiatric disorders such as adult ADHD. In this section, I explore the importance of the variation, according to the participants’ perception. To do this, I explored how participants viewed the importance of diagnosis. If they imply the importance of only one ‘accurate’ diagnosis, this will suggest that the variation might be problematic.

First, I illustrate statements of participants who emphasized the importance of the ‘right’ diagnosis. Participant 105 (55 years old, psychiatrist) explained why s/he supported diagnosis of ADHD for John and rejected diagnosis of borderline personality disorder that I told it was offered by other participants:

“As I say again, the fact that the patient was diagnosed ADHD and received treatment in the past that gave him improvements is quite strong, so I think

that ... the first option about the borderline personality...would be a bit wrong”.

So according to this participant, it is possible to view those different diagnoses as right and wrong options. Participant 138 (42 years old, psychiatrist) also believed that “the right” diagnosis is important because it is the basis for the choice of treatment:

“I think you have to get the diagnosis right, to get a right treatment”

Similarly, participant 150 (45 years old, psychiatrist) emphasized on the importance of ‘right’ diagnosis by explaining differences in drugs that are used for treatment of ADHD and other conditions:

“I guess the wrong treatment in that point ...you certainly wouldn’t use drugs like Atomoxetine for someone with borderline personality disorder or anxiety disorder, or someone who has cyclothymic disorder ... for the sort of patient with borderline, you can give neuroleptics which has the opposite pharmacological action to Atomoxetine”

Diagnosis could affect more important aspects, as explained by participant 127 (41 years old, psychiatrist). Although s/he emphasized the importance of considering other issues rather than diagnosis and indicated acceptability and good reputation of bio-psycho-social model, s/he finally concluded that diagnosis could have practical influences on the patients' well-being and health:

"As a medic, I feel that a diagnosis is helpful to have a careful framework in your mind to address some issues, you could have a different management structure for, in this case, ADHD ...it is important I think to differentiate ... because the management and prognosis, and everything is different ... I can see, the importance of wider issues, like: ... what does he consider a problem? What does he want addressing? ... If you are a good clinician, whatever you are managing, we do work with the bio-psycho-social model... So you could have this as a diagnosis ... and you need to address everything really. If you are asking me, yes, I think diagnosis is important, and yes, it can sometimes be labelling, but these days I feel that if you have a diagnosis of, for example, autism, it sort of opens up doors to various different services which would not be available to you, if you have a similar problem and do not have the diagnosis. So, it's a wider society thing rather than medicine."

However, not all the participants viewed the diagnosis to be that essential. Participant 113 (43 years old, psychiatrist) explained that

management has priority over diagnosis, however s/he cannot avoid diagnosis:

“In many ways, you’re quite pragmatic and actually the diagnosis doesn’t really matter too much. It’s because you are looking at the individual really. I’m treating them as individuals ... However, the difficulty is that now we see you want to have a diagnosis, in terms of record keeping and whatever, so it’s very hard to see somebody and not giving him a label”

Participant 056 (33 years old, psychologist) also doubted the importance of diagnosis, and explained that s/he will use a diagnosis only if it leads to useful treatments; otherwise a diagnosis could increase the perplexity of the situation unnecessarily:

“I see any diagnostic label of having a limited use, but probably being more useful in people who don’t have other problems, so if having an adult ADHD helps people get the help and support and functioning, then I see it as useful, but when it’s parts of a complex range of problems such as axis one or two problems, I think it just adds to the confusion about how is the best way to help someone”.

On a similar note, participant 157 (63 years old, GP) talked about how diagnosis could not provide the whole picture and is unhelpful in giving insight to an individual patient:

“I think maybe some of what we do has the danger of putting people into a category. Because it’s all very nice to be able to make a diagnosis! We are trained in this way, aren’t we? But, you know, why is it that one person with diabetes can go off and make a successful career as a high school teacher and run marathons ... and another is claiming incapacity benefit?”

Therefore, there are some clinicians, which do not base their clinical work on diagnosis. Participant 139 (39 years old, psychiatrist) suggested that s/he uses ‘formulation’ instead of diagnosis:

“I would rather give a formulation for this man than a diagnosis, why do we require diagnosis? ... If needed, I will give a diagnosis. If not, we treat the person without diagnosis... and if needed, and at the time of discharge he would need a diagnosis, then we can always put a querying this, querying adult ADHD, querying whatever”.

Therefore, although I observed an agreement on the existence of variation in the clinicians' perception, the importance of diagnosis and variation in diagnosis is not approved by all participants. Not only different participants provided different accounts, but also one of them illustrated different opinions towards the importance of diagnosis. Participant 018 (47 years old, GP) initially doubted the value of diagnostic labels and emphasized on the importance of management:

"I'm very scared about the labels ...I think what is important to some extent is to make sure you get the management right. The labels to some extent might be minor variances of the same thing, but what is important is we get the right outcomes and cut the side risks, improve the patients' health, improve the patients' mental welfare and improve their life".

Moreover, s/he mentioned an example of a situation in which diagnosis is less important:

"Well you look at bipolar disorder. Bipolar isn't a single entity. You know, you've got bipolar one, bipolar two, you've got rapid switching bipolar, I mean they are all different labels of a similar sort of disease. The management is similar, you need to use mood stabiliser with something else, possibly. And so, whichever label you use, the management has common features and so if

you had a GP who labels someone, bipolar two, and eventually the person is seen by a psychiatrist and is labelled as rapid switching bipolar, the management that the GP would start could well be correct or partially correct ... The label therefore becomes less important indeed. What is of value is the management, which is the important scenario.”

However, at the same time, the participant acknowledged the influence of diagnosis on treatment:

“And you could argue back saying unless you get the right diagnosis, you can’t get the right treatment. It seems to be chicken and eggs.”

Therefore, the importance diagnosis seems to be a complex issue and the participants perceived diagnosis in various ways: from helpful and essential to unnecessary and complicating. Accordingly, value and importance of variation in diagnosis could vary. For participants, who suggested diagnosis is the basis of management, variation in diagnosis might inform wrong treatment. However, variation in diagnosis might have less importance for participants, whose account on the role of diagnosis was otherwise.

5.4 Underlying reasons for the variation

In the following parts, I have presented the perception of participants regarding the underlying causes for variation in psychiatric diagnosis. These are factors that participants have directly mentioned to answer my questions about the reason of variation.

5.4.1 Differences in clinicians:

“It depends on the clinicians”

In this section, I present how participants, similar to Leder (1990), suggested characteristics of clinicians could affect diagnosis and treatment and result in variation.

Training

Training was a quality of participants that suggested having a role in variation. Participant 018 (47 years old, GP) explained that GPs could select their choice for training (hospitals and subjects), so some GPs do not have psychiatric trainings, and this could lead to variations. S/he also explained that s/he has been recently attending some training on bipolar disorder and is more aware of it.

“Because of different things you’ve done, different courses, etcetera, you might pick up other features ... And I think that is probably experience based and interest based. You have GPs interested in psychiatry, they are going to look for things that other people aren’t”.

A good example for how training could affect diagnosis was participant 105 (55 years old, psychiatrist), who was trained in another country, and s/he suggested that his/her different training has influenced his/her approach towards the vignette. S/he diagnosed the vignette as adult ADHD, but s/he believed his/her colleagues, who are mainly trained in UK, might view the vignette differently:

“In America the diagnosis of ADHD is; they are much more generous with this diagnosis compared to some of the European countries. So, I trained in (...⁴¹), I trained in American psychiatry and am a member of the American psychiatry association... some of my colleagues will understand this <the vignette> as a problem of personality, manifestations of borderline personality disorder, ... so the way you are trained, of course, will affect the way you understand this <the vignette>.”

⁴¹ the name of the country is deleted

Participant 117 (67 years old, psychiatrist) explained how training could lead to different practices:

“When we were trained, we got very powerfully influenced by people with strong opinions, and going in different directions, because of their influences, so its presumably part of the training theme, ... you know, psychiatrists will ask leading questions about hallucinations, for instance, when the social workers may not, or psychologists may not”

Participant 127 (41 years old, psychiatrist) also suggested that:

“Your training trains your mind as to what are the key things which are important to rule out”

Education could be related to the variation in diagnosis in different ways. The first point is related to the content of educational curricula, which is influenced by the socio-political process in which disorders are defined as discussed in medicalization theory (Conrad, 1992) (see section 2.2.3). Consequently, theoretical and practical educations could vary and as a result, clinicians might have different sets of reference-knowledge. Secondly, during

the theory part of education clinicians could have different interpretation of similar written materials (see hermeneutical factors in section 2.3.2). Thirdly, during the practical education, students are helped to develop schemas of theoretical through observations. This stage might have an important role in forming perception of clinicians as it determines the 'right' schema for the reference-words. However, it is dependent to existence of a particular patient and an 'informed' senior practitioner, which are difficult to provide for all students. Therefore, experiences in practical education could also vary and as a result, clinicians' perception and approach could vary accordingly.

Although, participants referred to the role of training on clinicians' perception, there were also some notes claiming that perception is not fixed and might change. I will explore account of participants on the role of age and experience on perception of clinician in the next parts.

Age

Participant 018 (47 years old GP) suggested that GPs with different ages might practice differently:

"If you have an older GP, you know, close to retirement, he might not be interested. Again, if you have a younger GP, perhaps having done a psychiatry house post, who is not long in the training programme, he may be much more

switched on. And therefore he might come up with something a lot faster than some of his older colleagues might come up with.”

Therefore, in the next chapter, I will explore the relationship between age of participants in this research and their approach to the vignette.

Experience

Participant 060 (33 years old, psychologist) suggested influence of experience on practice:

“I think some of it probably depends on people’s past experiences, things that they might be familiar with. For example, because I’ve got past experience or knowledge about working with people with brain injury, I suppose that would be one of the reasons why I would think brain injury as an alternative explanation <for the vignette>, where as different people might not think about that”.

Similarly, participant 113 (43 years old, psychiatrist) explained why clinicians could diagnose some disorders more often:

“It depends on the clinicians ... sometimes diagnosing an adult ADHD is probably more difficult than something like bipolar disorder, depression, or schizophrenia just from experience, because you actually see more people with those diagnoses; and adult ADHD is a newer diagnosis and something which five years ago you probably won’t even have thought about”.

This participant suggested that although clinicians are trained to identify wider items, after they start practicing and gain experience in diagnosing specific items, the resulted experience would facilitate possibility of identifying the specific items. Therefore, s/he suggested that different professionals probably will suggest different diagnoses for the vignette depending to their experience, and s/he anticipated different diagnoses that are accordingly suggested by different clinicians:

“From my perspective, I’ll be looking more at substance misuse; general adult psychiatrists, I think they’re probably looking more at bipolar; but forensic psychiatrists, might be looking more at the people with personality disorder; child psychiatrists, might be looking more at ADHD ... GPs would probably look at everything, but ... there are some GPs that have got a special interest in mental health and there are ones that might be looking more at bipolar, but I don’t think, I would be surprised if many think about adult ADHD really. But you never know, because you might have a GP that actually did child psychiatry or did a lot of paediatrics ... So it depends on the individuals really.”

This participant suggested that the type of clinicians, their personal interest and work setting might affect their perception and approach. Therefore, in the next chapter, I will explore whether there is any difference between GPs, psychologist and psychiatrists in terms of their perception and approach towards the vignette. I will also explore role of work settings and if participants did favour some particular disorders.

Cognitive set

In previous sections, it was notable that personal interest, training and experience seem to be related factors. Consequently, because of these different characteristics, clinicians might form some cognitive tendencies towards some particular diagnosis. Participant 147 (54 years old, psychiatrist) suggested:

“So you have different specialists with different interests making the diagnosis and ... if someone believes strongly in the existence of ADHD, then they are more likely to make the diagnosis, <compare to someone> who is sceptical.”

Participant 056 (33 years old, psychologist) explained this point by referring to the social construction of diagnosis, which is influenced by the type of patients that clinicians use to visit:

“I think there is an element of social construction in all diagnosis in a real setting, ... we tend to associate a particular behaviour or trait with our clinical background, because it is what we know well, and so we feel comfortable in diagnosing it, ... I am certainly well aware that I would see personality disorder traits in many individuals, where they might be seen very differently by someone working for substance misuse or psychosis services, they may see it probably very differently... which is associated with construction, where you come from and what your thinking is”.

Participant 117 (67 years old, psychiatrist) also suggested that after acquiring different sets of beliefs, clinicians will interpret facts differently:

“Different set of facts might be interpreted differently ... professionals come to a set of beliefs of their own, and very often consultation will get scattered around those beliefs as much as around the patient’s problems.”

In addition, participant 127 (41 years old, psychiatrist) described differences in clinicians by their different thresholds of clinicians:

“So it’s where your threshold is ... I think there is a problem here <in the vignette>, but some people might read it and need a bit more information to say: oh! there is a problem here.”

Finally, participant 139 (39 years old, psychiatrist) suggested that there are three different types of clinicians in relation to adult ADHD:

“It could depend whether you believe it, or if you don’t believe it. That’s two groups of people and the third group in the middle. Two groups, one can believe in adult ADHD are in that camp. Other camp, don’t believe in adult ADHD, and the third group, in the middle, is people who are shifting from one camp to the next.”

This classification is compatible with general categorization of participants that I presented in section 4.2. Groups of ‘suggested ADHD’ and ‘did not mention ADHD’ are comparable with two camps of clinicians who ‘believe in adult ADHD’ and ‘don’t believe in adult ADHD’. The ‘considered ADHD’ group could be ‘the middle’ group.

The cognitive set is not equivalent with the intentional awareness of guidelines. I came across to this conclusion through my observation of unanticipated 'difficulties' in my study. The majority of participants answered the vignette without any complaint. They offered one or more diagnoses, which mean they could compare the vignette with their different sets of reference-knowledge. However, five participant referred that they need more information, and Participant 114 (62 years old, psychiatrist) who suggested ADHD for the vignette, mentioned at the beginning of his/her reply to the questionnaire:

"This reached me at ...⁴² and due to work pressures I have taken it to home to study. I am interested in your projected study and I would like to help: but I tend to struggle with questionnaires and written vignettes because, however well written they are, they are never like real patients; and my work in therapy is always determined by immediate issues depending on the client's responses to my face and my own questions and comments. So I am struggling, but I will do my best"

I could justify the demand of some participant for more information by the point that they might be interested to diagnose some other disorders rather than ADHD, and as I provided information for diagnosing ADHD, the

⁴² Name of the health centre is deleted

vignette is short of some facts that are necessary for other conditions. However, I asked myself if answering a vignette is exactly like one part of the process of diagnosis, why participant 114 (62 years old, psychiatrist), who was well knowledge and suggested ADHD for the vignette, found it difficult to answer the vignette? In addition, during the interviews when I asked participants what sort of information they preferred to be added to the vignette, they did not refer any piece of information, which is among the diagnostic criteria of ADHD or similar disorders. Therefore, I conclude that the demand for more information might be also an indicator that those participants also prefer to encounter with clients face to face and they found it difficult to answer the vignette, similar to participant 114. It seems that those participants needed to 'see' the clients for some reason other than gathering information and they did not need more 'words'.

Therefore, a way for some clinician to make the diagnosis could be to rely on their cognitive set/schema of people with disorders. This means that clinicians might compare the schema that they obtain from clients with the 'reference-schema' that developed either during their educational period or from subsequent experience. In this method, the diagnosis is not based on producing 'notes' thorough observation of clients and comparison of notes with reference-words; but clinicians have to 'see' clients in order to be able to suggest a diagnosis.

Existence of this schema-based diagnosis method not only made this study difficult for some participants, but also could have a role in variation of

psychiatric diagnosis. During the education, students with this schema-based approach would need to 'translate' words of theoretical materials into reference-schemas; and it will be possible that they translate the same description into different schemas; or during the practical education, they might see different clients and gain different reference-schemas. If clinicians have different cognitive sets/schemas of ADHD in mind, there will be variation in their diagnosis and perception; even if they visit a similar client and receive exactly the same schema of the client. Such approach might lead some participants not to welcome offering a diagnosis for a vignette; and it could produce concerns on success of disseminating guidelines, especially for occasions in which a new disorder is identified. I will discuss this point in chapter 7.

As I mentioned above, in order to suggest ADHD for clients according to the schema-based method, clinicians need to have schema of ADHD; but this schema would not be necessarily the same and it could have variation. Participant 112 (50 years old, forensic psychiatrist), who asked me regarding diagnostic tool for adult ADHD, rejected diagnosis of ADHD in a client based on difference of his/her schema of ADHD and the schema s/he gained from the client:

"I saw another patient last week in the out-patient clinic that was said to have had ADHD in childhood but he had a calm and slow stature and yes, he had previously ADHD and he may still have it, but I didn't believe in it"

If it is possible to have various schemas of a client, the question will be the possibility of attributing right and wrong values to them. It raises the concerns on lack of an objective standard for comparison, which I will discuss in the section of 'subjectivity of diagnostic methods'.

The other point is possibility of existence of various schemas for one disorder. According to Wender (1995), ADHD could have different presentations:

"ADHD is *said* to be present if a certain *number* of symptoms is present. In modern terminology, this is a "polythetic" method of categorization ...

A polythetic definition of a disease (or of anything else) might assert that it is present if any two symptoms A, B, C, D, or E are present. Thus, two patients may have the same disease and have no *outward* symptoms in common. For example, one patient might have the two symptoms A and B while another had C and D or C and E or D and E."(p 9, his emphasises).

Wender provides example of rheumatic fever as a medical example of 'polythetic' condition, and similarly added that ADHD patients could have different presentations, some with hyperactivity and some without it (ibid). Therefore, if a clinician has only one schema of ADHD, for example as

someone who is overtly hyperactive, s/he will not suggest ADHD for those who do not display such presentation (similar to participant 112 in the above quotation).

Therefore, clinicians might rely on “representativeness heuristic” and evaluate the probability by degree to which the client is representative of the disorder; i.e. the degree by which the client resembles a typical patient of the disorder (Tversky and Kahneman, 1974, p 1126).

Tversky and Kahneman (1974) believed that this approach could lead to errors; as they suggested similarity is not affected by some factors that could affect probability. Moreover, they emphasised related misconceptions are observed even in experienced researchers (ibid).

In addition, they introduced the concept of “the illusion of validity” (ibid, p 1126). This concept when applied to the psychiatric diagnosis implies that the more a client is similar to the typical case, the more confident the clinician would be on the anticipated diagnosis, even without checking valid criteria of diagnosis. Because of this condition, clinicians might rely on their cognitive set despite opposing evidences.

Moreover, Tversky and Kahneman (1974, p 1126) referred to “insensitivity to predictability” as another source of failure in estimating probabilities:

“If people predict solely in terms of favorableness of the description <referring to description-based studies>, their prediction will be insensitive to the reliability of the evidence and to the expected accuracy or the prediction.”

They suggested that while people do not have enough information for the prediction, they might do the prediction based on their cognitive set or *intuition*.

5.4.2 Nature of diagnostic methods:

“Depending on which book you are looking at...”

In the previous section, I illustrated the idea of participants on the role of characteristics of clinicians on variation. In this part, similar to discussions in chapter two over psychiatric diagnosis, following quotations illustrate how the variation could be explained according to the way psychiatric diagnoses are made.

Overlap in diagnostic criteria

Participant 056 (33 years old, psychologist) explained how the structure of DSM makes it possible to offer multiple diagnoses for the same client:

“My view of DSM in terms of personality disorders is there are huge overlaps and it tends to be very descriptive, so people’s behaviour could fit multiple diagnosis; ... I think its very easy to diagnose people in different categories”

Participant 018 (47 years old, GP) also suggested that real patients usually do not fit exactly into any sort of diagnostic criteria. Therefore, it is possible to match them with different sort of criteria:

“Knowing so many different diagnostic criteria in psychiatric disorders, nobody is gonna present with standard classical features. So there’s always going to be variance.”

Overlap in the diagnostic criteria could exist in medicine as well, but it seems to be more difficult to handle in psychiatry. For example, fever is a sign for many different diseases with various sources; however, it might be possible to differentiate them via ‘objective’ measures. For this reason, participants perceived psychiatric diagnosis to be more difficult and differentiation between overlapping psychiatric disorders to be much more complicated. For example, when clinicians identify impulsivity in a client, it will be necessary to decide whether it is a ‘thoughtless’ impulsivity of ADHD or a ‘compulsive’ impulsivity of borderline personality disorder (Wender, 1995, p

131). Without such differentiations, similar clients might be diagnosed differently, or different clients might be diagnosed similarly. This is related to subjectivity of diagnosis as explained in the next section.

Subjectivity of diagnosis

As I mentioned in section 2.2.2, there are debates on psychiatric diagnosis because of their subjectivity. Participant 112 (50 years old, forensic psychiatrist) believed that the subjectivity of diagnostic methods could cause variation in diagnosis and treatment of psychiatric disorders:

“We do not have easily take-able or practically useable diagnostic tool to validate diagnosis. And diagnosis is subjective and requires high-order skills; they are not basic measurements of something, like length or size or temperature; they are high-order complex judgments that takes a kind of experience of a whole range of things. That’s the nature of psychiatry. So, one psychiatrist, <might suggest> personality disorder; another psychiatrist, <might suggest> psychosis; ... definitely does happen.”

In addition, participant 113 (43 years old, psychiatrist) compared diagnostic tools of psychiatry with medicine:

“I think in psychiatry, unlike things like medicine, where you’ve got for example someone who’s anaemic and you take the blood sample and you’ve got low haemoglobin and you say that’s the anaemia and then you would treat them. In psychiatry, we actually haven’t got the measures, although there are rating scales and classification systems, at the end of the day, it’s still quite subjective in terms of seeing the patient.”

Participant 157 (63 years old, GP) also did the same comparison, while explaining lack of objective tools in psychiatry:

“Mental health diagnoses are extremely difficult. Because you are not dealing with, he’s got a haemoglobin level of seven: Oh, well he is anaemic, whatever cause it’s got. But he has these symptoms, these symptoms fit this picture. And yes, you could fit it into another paradigm.”

The subjectivity that participant introduced as a source of variation in diagnosis could be related to existence of stages in which clinicians translate their perceptions of clients into words (interpreting the clients); or they translate words of guidelines into perceptions (interpreting the guidelines). Although even in medicine those stages exist, however, in medicine it might be possible to check the result of interpretations with an objective measure that is less dependent to language. However, psychiatry is related to

psychological well being (Pilgrim, 2005), which is reflected in behaviours and speeches. Patients or their relatives use language to communicate about their situation and lack of objective measures, make psychiatric diagnosis greatly dependent to language. In medicine, it might be possible to have a visible and measurable sign or symptom, which could be detected by instruments. Leder (1990) suggested the necessity of interpreting the importance and meaning of those 'objective' signs; however, in medicine there will be less argument on 'existence' of objective signs; while in psychiatry, clinician have to mainly rely on language even to detect 'being' of signs and symptoms.

For this reason, clinicians might use success of treatment as a way to check the diagnosis. Leder (1990, p 18) describe it as a 'hermeneutic circle' and suggested that clinician interpret the client, reach to a diagnosis, start a treatment, again interpret the results of treatments, and check the accuracy of their diagnosis according to the success of therapy. In the next chapter (section 6.2.1), I will illustrate how belief of participants in acceptability of ADHD could be related to their observation on success of treatment.

However, this approach has some limitations as treatment of ADHD involves selection between different sorts of treatments; and uncertainty towards an option or failure of a treatment should not be reflected on the whole diagnosis. As Wender (1995, p 150) suggested, if one sort of treatment does not help, other solutions might work for the client:

“We have a number of effective medications. It is impossible to determine beforehand which will be most effective for any particular patient, and finding the best medication may require trying several.”

As a result, if a clinician is not certain about a diagnosis, and try to use treatment as an ‘objective’ validating tool, s/he might rule out a diagnosis, based on insufficient attempts for treatment. Therefore, response to treatment is not an ideal way to reduce subjectivity and resulted variation in diagnosis.

The subjectivity of diagnosis will provoke questions on the validity and reliability of psychiatric diagnosis. However, having an ‘objective’ measure, a gold standard, is essential to evaluate reliability, validity and accuracy of measurements and diagnoses (Fletcher et al., 1996). As mentioned in section 2.2.1, Wender explains the situation (1995, p 42 his emphasis):

“Defining active tuberculosis by the presence of tuberculosis bacillae in the sputum, one could determine the accuracy of physical examination, chest X-rays, or tuberculin skin tests in diagnosing the disorder. *No such etiological diagnoses are available for “functional” psychiatric disorders in general or ADHD in particular.* Accordingly, there is no way of determining the accuracy ... of current diagnostic techniques because there are no methods, biological

or otherwise, for independently determining the presence or absence of etiological factors.”

Therefore, if one attempts to check the ability of psychiatric measurements to spot existence of disorders, this in turns in a circular argument relies on the ability to detect existence of disorders! Similarly, Pilgrim explained a related circular logic and illustrate it with an exemplary conversation (2005, p 8):

“Symptoms are used to define a disorder but they are also accounted for by the presence of the disorder, using the following logic:

Q: how do you know this patient has schizophrenia?

A: because she lacks insight into her strange beliefs and she experiences auditory hallucinations.

Q: why does she have strange beliefs and experience hallucinations?

A: because she suffers from schizophrenia.”

Consequently, as mentioned in section 2.2.2, Wender (1995, p 43) called psychiatric measurements “pseudo measures” that instead of measuring a ‘truth’ are based on agreements. Therefore, he suggests

possibility of evaluating reliability of them. This suggests possibility of agreement on one particular definition, and attempting to produce measures to ensure all practitioners diagnose 'similar' phenomenon similarly. Diagnosis guidelines such as DSM aim to achieve that reliability. Therefore, exercising care and following standard protocols are suggested to reduce variations in clinical measurements (Fletcher et al., 1996).

However, there is a difference between reliability that could be obtained via objective measures in medicine and subjective evaluations in psychiatry: In the first instance, when a method is proved reliable in a research setting, there would be less concern on duplication of reliability in other settings. However, if reliability is obtained in a subjective measure such as psychiatric diagnostic methods, the reliability is highly dependent on clinicians.

Concluding from the above discussion, the performance of clinicians could lead to variation in psychiatric diagnosis: the choice of diagnostic criteria they have employed and the degree that they have followed the guidelines. This adds a new dimension to the account of participants who implicitly relocated the responsibility from their performance and attributed the variation to the nature of psychiatric diagnosis.

Variation in diagnostic criteria

Participant in the previous parts suggested how the nature of diagnostic methods could cause variation in diagnosis. However, participant 113 (43 years old, psychiatrist) suggested two other factors which are related to the role of diagnostic methods in variations. S/he referred to change in diagnostic criteria over the time and existence of different sets of diagnostic criteria:

“The psychiatric things become quite difficult in terms of diagnosis, because, often diagnosis is actually changing ... We tend to use ICD-10, also we tend to use DSM-IV as well. Depending on which book you are looking at, certain diagnoses slightly differ. So one person might fulfil criteria for a certain condition, like schizoaffective disorder in one book, in another book it might be saying that this is more like a depressive illness with psychotic symptoms.”

In medicine, transformation of diagnostic methods during the time might occur probably based on ‘objective’ developments, such as availability of a new imaging method, or discovery of a new pathogen. However, in lack of that objective measures, variations in diagnosis methods in psychiatry, might reflect different agreements, which could contribute to the variation in diagnosis.

In section 5.4.2, psychiatric diagnostic criteria were introduced to be overlapping, subjective, variable and various. Therefore, the source of variation was implicitly moved from clinicians to the diagnostic methods; in the next section, it is further relocated to the 'nature' of mental health problems.

5.4.3 Nature of disorders:

“It depends on what is being looked at”

While the participants explained the role of clinicians and diagnostic methods, they also referred to the nature of disorders, i.e. their unchangeable intrinsic characteristics. In this section, I will explore this later point in more detail and illustrate occasions in which participants related variation in perception and approach of clinicians with different aspects of mental health problems.

Quality of sign and symptoms

Participant 117 (67 years old, psychiatrist) justified variation in psychiatry by referring to the complexity of human behaviours and psychiatric disorders:

“Well because it’s a complicated business, human behaviours are very complicated, and the diagnosis is a very reductionist activity, sometimes quite necessary, for all sort of reasons including research; but, we all come at problems with different angles. Some people might say there is something wrong with his <John’s> brain and it should be treated for ADHD, some people might say he has emotional difficulties, he should be treated with some kind of psychotherapeutic approach, some people might say all kinds of things”.

Participant 105 (55 years old, psychiatrist) suggested that variance and inconsistency in the diagnosis could be more prominent in some sorts of disorders and less in others. S/he implied a condition like schizophrenia, which has ‘obvious’ sign and symptoms, is less likely to be perceived in different ways:

“The adult person who is hearing voices and telling me that he is being followed in the street and the CIA is intercepting his brain, unless anything of what he says is true, that person really will have a consistent diagnosis of paranoid schizophrenia.”

Participant 147 (54 years old, psychiatrist) also differentiated between disorders, according to what s/he described as 'floridity' or 'subtleness' of symptoms:

"If the symptoms are really florid, then probably everybody would agree on the diagnosis; if the symptoms are more subtle, there maybe more interpretation and debate about the nature of the pathology."

Those participants suggested that symptoms of some disorders, such as schizophrenia are more florid and less prone to interpretations. As I mentioned in section 2.2.1, similarly Wender (1995`, p 74) explain potential variations by nature of symptoms:

"Even if employing identical criteria, one can expect variations in interrater reliability. A recurring problem is that the relevant behaviours are dimensional (e.g. hyperactivity) rather than qualitative (hallucinations)."

This implies that symptoms like hyperactivity, in contrast to hallucination, are acceptable to happen to some degrees in anybody. They become a 'symptom' according to their quantity, when they are seen consistently (American Psychiatric Association, 2000).

In this perspective, the point of subtleness of symptoms could refer to 'statistical notion' of mental abnormalities (Rogers and Pilgrim, 2005, p 5) where the quantity of an action makes it abnormal. For example, we might have a normal curve for concentration ability that introduces extreme cases as ADHD patients; In contrast to other ways of defining abnormalities, in which symptoms do not occur in 'normal' population. Therefore, in defining abnormality based on the normal distribution, there might be disagreements on the cut-off points, as discussed in section 2.2.2 and explained by Participant 127 (41 years old, psychiatrist):

"What is normal behaviour? It's like a statistical thing; it's your bell shape curve. So there is a range of what is normal. If you are the person who is trying to diagnose problems, you need first to acknowledge that there is a problem. So what everybody would consider the range, which is acceptable, could be slightly different."

In addition to the statistical notion, the difference in interpretation of behaviours could be related to the context. For example, at the moment for a clinician in UK, 'hallucination' could have only one meaning; while there is various ways for understanding 'hyperactivity'. Otherwise, both conditions are similarly dependent to language, lack objective measures, and are prone to interpretations. This implies the importance of existing competing definitions in completion of medicalization (Conrad, 1992).

In this section, participants suggested that the way normality/abnormality is defined and the quality and type of the symptoms could affect consistency of the diagnosis. In the next parts, I present account of participants on the role of other characteristics of sign and symptoms of mental health problems in variation.

Period of symptoms

Participant 127 (41 years old, psychiatrist) suggested the period and course of symptoms could have a role in variation of diagnosis:

“I think what happens for diagnoses like personality disorders, autism, probably ADHD, ..., its difficult to say this is the starting point, this is the end point and this was an episode. Whereas for axis one diagnoses, I think you will have more people agree that this is a depressive episode or this is a psychotic episode or whatever.”

S/he then explained how some disorders are prone to interpretations:

“In Axis II, personality and developmental disorders, each presentation that you see can be explained with what kind of glasses you wear. If you see more

autism, its sort of: “oh! I think this can be explained with the model of autism”, whereas if I was more into child psychiatry, have ADHD as my thing, I can say “oh! This is ADHD”, so it depends on what is being looked at, I think there is more concurrence if there is straight forward bipolar disorder or a psychotic or anxiety disorders, or panic attack.”

According to the account of that participant, when there is a clear start for a disorder, it is easier to identify the disorder compare to situations when characteristics are permanently with the patients. If a disorder has a particular starting point, the new situation could be compared with previous normal condition. However, for clients with conditions like ADHD, which do not have a clear starting point, clinicians are more likely to ‘wear particular glasses’ and see the clients similar to their ‘thing’ (favoured diagnosis). This indicates the relationship between different items discussed so far, such as the role of clinicians and the effect of symptom’s characteristics.

Permanent time course of ADHD could make identification of the disorder difficult, even for the people with a diagnosis of ADHD:

“The ADHD patient often cannot describe his behaviour, for he has lived with it his entire life. When his behaviour is described by others, he often feels that it is not he who is being talked about” (Wender, 1995, p 140).

Therefore, for a condition like ADHD, there would be more chance for

variation in definition of the situation.

Relationship of different disorders

In previous parts, participants suggested that the probability of variation in the diagnosis of different disorders is not the same. The other aspect is the relationship of different disorders. Participant 113 (43 years old, psychiatrist) pointed to the possibility of comorbidities as a factor in variation of diagnosis. S/he suggested that ADHD patients might use some substances as self-medication and the drug use could be considered as a comorbid problem. S/he later explained that the overlap between different disorders (ADHD, personality disorders, drug addiction, and mood disorders) is not just similarity between their signs and symptoms. These conditions could have a causal relationship; and occurrence of one condition might facilitate diagnosis of others:

“Because children with ADHD don’t concentrate, they’re often getting in trouble with the law and going down that path to the criminal justice system. Now with this group of people, they are not treated... you could look at the diagnosis for antisocial personality disorder... then they’re starting to take amphetamines, always to self-medicate to calm themselves down, So you have a diagnosis of substance misuse, opioids dependent, cocaine dependence ... the other thing is again if they are taking drugs, they have an

effect on the mood and the mood can go up and down, ... and again they could be given a diagnosis of bipolar disorder.”

According to explanations of participant 113 (43 years old, psychiatrists), ADHD patients could receive different diagnoses of personality disorders, substance misuse and bipolar disorder during their life span. ADHD could lead to situations such as acting out behaviours, mood swings, which could be related with guidelines of different disorders. Patient will manifest different dimensions, and clinicians might pay attention to different bits. This is related to access of clinicians to different information in the process of diagnosis, which I discuss in the next section.

In section 5.4.3, participants suggested that some sorts of psychiatric disorders do not have ‘florid’ signs, do not have start and end point, and they might have overlap with other disorders. These entire situations facilitate variation in their diagnosis and treatment.

5.4.4 Different information:

“It all depends on who you talk to”

According to the suggested themes in previous parts of this chapter, clinicians might look at different pieces of information, or they might interpret the same information differently. In this section, participants explained the variation by the fact that clinicians could access different information.

Communicability of clinicians

Participant 018 (47 years old, GP) suggested that different clinicians might have different abilities in making rapport and obtaining information:

“It all depends on who you talk to; some people, who are more comfortable with you, might be willing to tell more intimate stuff.”

As above points implies, when clients explain their problems to the clinicians, they ‘translate’ their problems into their own words. This process could be another source of variation as Baron (1990, p 27) explained:

“People’s memory varies, they tell a different story to the intern than to the attending; people in pain tell any number of stories; patients’ memories are subject to their own interpretation and reinterpretation introducing nuances of meaning and ambiguity. Patients are busy interpreting themselves all the time, and any presentation to the doctor is only one frame in a very long movie.”

I did not directly explored performance of real clients, however, participants’ accounts in this part and next sections inform such a possibility.

Influences of social settings on communication

Participant 095 (43 years old, psychologist) provided examples of situations in which some social factors might affect the information that clinicians have 'access' to them:

"There is a culture in the prison, where it says "you get an easier ride if you come to the hospital" and we do have times when individuals may describe voices and thoughts because they think "I don't like being in prison, I'd much rather be in a hospital where I think I'll be looked after". ...because being in a ward which is occupied by ill individuals isn't what they thought they were going to come to, so they might then say, "look, I didn't really have these voices telling me to do it"; Especially if they're in prison, there is a sort of mapped-out period of time before they leave, its not as obvious here, when they're detained under mental health act"

In these situations, existence of social, cultural and legal factors could affect the information that clinicians could encounter.

Changes over time

Participant 113 (43 years old, psychiatrist) explained how accessible information might vary in different occasions:

“The patient coming to see you, the presentation can change over time. So if you look at a review of psychiatric notes over sort of twenty years, don’t be surprised that the diagnosis actually changes with time. Initially it might say well, it is schizophrenia; a little bit later, it might say it looks like bipolar disorder; a little bit later it might say actually, this is more like personality disorder.”

Therefore, in these occasions, when clinicians observe a client have received various diagnoses, the variation is justified by existence of changes in the information that clinicians could obtain.

5.4.5 Social factors:

“Cultural issues play their part”

In sections 5.3 and 5.4.1, participants referred to social factors that frame their trainings and as a result, their clinical practice. In this section, I further explore accounts of the participants on social issues that could justify variation.

Clinical culture

In section 5.4.1 (cognitive set), participant 127 (41 years old, psychiatrist) stated that clinicians might have different thresholds for identifying a behaviour as abnormal. Participant 105 (55 years old, psychiatrist) related the existence of variation in the thresholds to cultural differences:

“Cultural issues play their part ... because acceptance or rejection of impulsive behaviours differs amongst different cultures, and tolerance for some behaviours is clearly different, I mean it’s a matter of judgment,... tolerance for impulsive behaviours is clearly higher in ...⁴³ than here because ...⁴⁴ type of culture.”

In section 2.2.1, I referred to the literature that reports lower prevalence of ADHD in UK comparing to USA. Following participants explained how they perceive the situation. Participant 112 (50 years old, forensic psychiatrist) supported the low rate of diagnosis, because:

⁴³ Name of the country is deleted.

⁴⁴ Geographical name is deleted.

“I believe that the prevalence of ADHD is lower than reported in the literature, particularly American literature. ... I believe that it is connected with the American psychiatrists’ tendency to prescribe medications more readily than the UK psychiatrist”

To justify different thresholds in UK and USA, Participant 138 (42 years old, psychiatrist) referred to the role of pharmaceutical industries:

“The level of ADHD <in the USA> has shown to be much much higher than us, because of a much lower threshold for diagnosing ADHD in children, ...we <British clinicians> are much more resistant to the diagnosis ... because in the States, pharmaceutical industries lead and try to create a large market for the drug ...”

S/he then gave an example of how USA and UK health care systems could act differently:

“If in the US you go to your private GP or private surgery, saying: “I have a big nose, I want the surgery to reduce it”; they will say: “fine, and that will cost you so much money”; if you come to the NHS, see a GP saying: “I have a big noise, I’d like to reduce it”, he may say: “well, actually you can, if it’s

disfiguring; actually this is not disfiguring, you wouldn't get this treatment on the NHS".

That account of the situation of ADHD in USA is important, because it justifies lower prevalence of ADHD in UK as a wise resistance and conceptualizes ADHD as an invalid disorder produced by pharmaceutical industry. As participant 138 continued his/her above explanations by questioning the validity of ADHD:

"My understanding of the adult ADHD is, I don't know really is it a disorder by the clinical evidence or by the pharmaceutical industry to make a market?"

This approach, which is close to antipsychiatric views (section 2.2.2), might exist in other clinicians as reported by participant 058 (43 years old psychologist):

"Some of my psychiatric colleagues are very critical of the number of American children who are diagnosed with ADHD ... and are given medication from the age of eight or nine, perhaps much younger than we would want to do that."

However, participant 127 (41 years old, psychiatrist), who also recognized the difference between the countries, was not critical to the drugs:

“I mean ADHD is American ... there is a big debate, because you are using amphetamines ... but they <people with ADHD> improve, they can concentrate ... I think the issue over here is about the society as a whole and the view about drug use and drugs of abuse, ... people vary a bit over here <UK> ... I have seen people who improved on methylphenidate or Ritalin”

Therefore, on the one hand, social factors might affect perception and approach of clinicians and cause variation; on the other hand, participants might refer to social factors to justify their own perceptions and approach.

Regulations and resources

Other than the cultural aspects, other social factors could affect preference of clinicians. The regulations and resources of the British health care system will encourage particular sort of managements and might discourage other approaches. Participant 018 (47 years old, GP) referred to one sort of incentives:

“Within the UK, there is the QOF⁴⁵ system, ... the government allocates points, a GP is supposed to score every year and they just start adding mental health issues to that point system. So that if you see someone whom you diagnose as depression, then you’ve got to do a questionnaire audit, such as the K10 or something like that and you have to see them every so often to then claim the points which are financially important ... at the end of QOF financial year.”

There are also limitations in resources of NHS that might affect the decision over a particular client as explained by participant 152 (53 years old, GP):

“Under the NHS at the moment, every practice has a nominal budget, for all the services that it provides ... we are expected to provide care for people, within that fixed resource ... with somebody like John, the most expensive thing that you can do for somebody is to arrange any treatment which requires them to be resident in the hospital. That’s extremely expensive ... I would have to make a special request for funding, because I wouldn’t be able to fund it out of my budget, so I would have to write to the local primary care trust, and make a case for making exceptional payment ... and in the mean time, John gets no help... So the help is either rationed by a waiting list or is rationed by finance”.

⁴⁵ Quality and outcomes framework

Therefore, social factors could influence process of diagnosis in many ways. There are also some other social/political factors such as existence of licence for application of drugs and specialist centre or person to for referrals, which I will explore in the next chapter.

5.5 Discussion

In this chapter, I explored the idea of clinicians on the variation. This was in relation to the research question number seven.

I observed that experience of clinicians confirmed existence of the variation. They provided different examples in this regard. However, there were controversies on the importance of this variation. Some viewed variation as individual approach to the clients via formulation and some identified variation in diagnosis to be potentially acceptable as it could end to similar managements; however, others suggested that variations in diagnosis could be inappropriate, because it might lead to contradictory drug therapies.

Participants explained existence of variation based on different grounds. Some referred to different information that could be available for clinicians. This might happen in real settings, but in this research, participants had similar information. Participant also referred to the social factors that affect perception and approach of clinicians. In this research, I have had little opportunity to explore directly the wider social factors.

Participants also attributed the variation to characteristics of clinicians and psychiatric disorders and diagnostic methods. I will explore further those factors in the next chapter.

Overall, introduced factors reflect the existence of subjective interpretations that contribute to the variation in psychiatric diagnosis. It is notable that reliability has been introduced as an achievable aim in diagnosis of adult ADHD (Young and Toone, 2000). However, participants justified variation and did not suggest the possibility of overcoming variation, for example by following guidelines. This might reflect attempt of participants to rationalize their performance: their accounts indicate the observed variation is not caused by their failure in following guidelines, but it is related to 'nature' of psychiatric disorders and diagnostic methods.

Dependency of diagnosis on the clinicians, which was suggested in this chapter is in confirmation of Leder's conceptualization (1990) that suggests diagnosis is like a process of writing with three different authors of patient, his/her body, and the doctor. I will talk on the dependency of diagnosis on clinicians in chapter 7.

In the next chapter, based on my interview data I focus on the factors related to the characteristics of clinicians, and hermeneutical factors, which are related to the nature of diagnostic methods, and nature of disorders. Those issues will reflect my analytical conclusions, which could be in confirmation or confrontation with the participants' accounts in this chapter.

Chapter 6 : Exploring variation

6.1 introduction

In chapters four and five, I evaluated existing variations in perception of the participants and their accounts in this regard. In this chapter, I will try to understand underlying causes of the variation. For this purpose, I initially explore factors related to the characteristics of participants. Then, I explore how diverse participants have interpreted a similar part of the vignette. The aim here was to validate the accounts given in previous chapters, obtain more information and examples, and access new factors.

6.2 Role of characteristics of the participants

Initially, I focused on the factors that could help me understand the position of the participants towards ADHD (section 4.2). I coded the data related to each participant, and tried to find underlying reasons for the participants approach towards ADHD. For example, if a participant suggested ADHD, I attempted to understand the reason for such approach (see table of summary of interview findings in Appendix E). The following text box illustrates the factors, which are potentially relevant to the participant's perception. In this example, work setting, misconceptions, previous experiences, awareness of

diagnostic criteria, and drug related concerns appear to have informed the participant's perception towards adult ADHD.

Figure 6.1 Summaries of related perceptions of a participant

Participant 112 (50 years old, forensic psychiatrist)

S/he worked in a forensic setting, where s/he suggested most patients have a diagnosis of personality disorder or schizophrenia. S/he recognised the vignette to be about ADHD, but considered most of it equally consistent with personality disorders, which s/he suggested to be more prevalent. S/he believed that presence of John in university made the diagnosis of ADHD unlikely. S/he once saw an adult person who was diagnosed with ADHD, who was treated unsuccessfully with Ritalin. S/he recommended ICD criteria for the diagnosis of ADHD in adults, and also believed that patients in a forensic setting might abuse or trade amphetamines. At the end of the interview, s/he enquired about diagnostic criteria for ADHD in adults.

After analysing data of each participant, I evaluated total factors (see the table of distribution of important factors in Appendix E). The result of that analysis is presented in the following section.

6.2.1 Experience

“I personally haven’t seen any case”

Participants’ experience seemed to influence their perception. For example, participant 157 (63 years old, GP) was in the ‘suggested ADHD’ group. S/he claimed that most of his/her colleagues believe adults out-grow of ADHD, in contrast to him/her, who accepted the concept:

“I think the perception probably among most GPs would be: ‘this is a childhood thing and children would grow out of it’.”

S/he justified his/her acceptance by his/her experience of observing a patient:

“The reason I came to accept this was once I had a patient She was a difficult baby, she was a difficult child at primary school, she was even a more difficult teenager, she was clearly very bright, but not achieving her potential. I can’t remember if she was actually excluded from school or came very close to it ... She eventually achieved enough to go to university and she had really a disaster there ... She wasn’t with me, but came back here on one occasion, and said “I know what’s wrong with me, I’ve got adult ADHD and I would benefit from being on Ritalin”. ... It wasn’t a GP thing and there were no adult specialists ...she could find someone in London who agreed and then I agreed to prescribe Ritalin. And she really did find it a huge benefit ... So she

kind of convinced me, because she was hugely better, she managed to cope better on Ritalin.”

Similarly, participant 139 (39 years old, psychiatrist) referred to his/her clinical experience to justify his/her position:

“I personally believe in adult ADHD, and in fact back when I was a junior doctor, I did speak to a consultant in Maudsley about an adult ADHD patient, ... we started him on Ritalin, and he was like a totally different person over night, the number of attendance to A&E , the police and the social services involvement diminished ...”

However, despite the fact that this participant announced that being *‘personally believe in adult ADHD’*, s/he was in the group of *‘considered ADHD’*, not *‘suggested ADHD’*. I could justify this by the fact that s/he used to work in a crisis centre, where as s/he mentioned they mainly worked based on formulation. The participant approached the vignette in a similar way and did not suggest any particular diagnosis; however, in his/her list of actions *‘recommencing Ritalin’* was also included. This indicates that some clinicians did not suggest ADHD, while they are familiar with ADHD, because making a diagnosis is not their professional priority. I will explore the influence of approaching the clients based on formulation in part 6.2.6. In this recent example, perception of the participant was influenced by both observing a successful treatment of adult ADHD and his/her work setting.

Therefore, participants' perception and approach could be affected by other factors, and experience alone would not determine them.

By contrast, with the experiences described above, three participants recounted attempts to treat adult ADHD patients with psychostimulants, which were discontinued due to lack of benefit or undesirable side effects. These participants fell into the 'considered ADHD' (participant 112) or 'did not mention ADHD' groups (participants 056 and 058). I explored what sorts of factors inform perception of these participants other than their experience. They did not appear to be aware of diagnostic criteria for adult ADHD. Participant 112 (50 years old, forensic psychiatrist) referred to ICD-10 for diagnosing ADHD in adults, and s/he directly asked for information in this regard. In the interviews with the other two participants, I also came across other items that could also explain the participants' position. Participant 056 (33 years old, psychologist) was interested in personality disorder, and suggested this disorder for the vignette. Participant 058 (43 years old, psychologist) found it hard to suggest a diagnosis for the vignette and preferred to approach it based on formulation. S/he suggested depression and anxiety in reply to the vignette-related questions, which was similar to the participant's usual patient type as introduced by him/herself.

In addition, for the following participants, the experience did not appear to inform their perception and approach. The participant 105 (55 years old, psychiatrist) referred to his/her experience of treating an adult ADHD patient with psychostimulants. However, in this case, s/he did not justify his/her knowledge by his/her experience, but attributed it his/her training

that was in another country with an American-style psychiatric educational system.

Three others⁴⁶ who were in the 'considered ADHD' group, and generally accepted the concept of adult ADHD, referred to potential cases, whose diagnosis of adult ADHD was not formally confirmed, for example, they were parents of children with a diagnosis of ADHD, or clients who did not attend their appointments for further evaluations. In these cases, the experiences did not have the quality that could be capable of making substantial change in the attitude of the participants.

Participants 127, 018, and 095 declared that they had never seen an adult ADHD patient. Participant 127 (41 years old, psychiatrist) explained:

"I personally haven't seen any cases; actually I have just received a referral on Friday, which is quite similar to this <John> and that is a person who has learning difficulties and has been on Ritalin, who has now turned eighteen and been referred to adult services. I have to read up, because I don't know, it's out of area of my expertise".

In this case, the participant referred to the experience as a motivating factor to study and gain knowledge.

⁴⁶ Participants 060, 113, 117. Discussions of the section 6.2 are based on analysis of data of 16 interviews, therefore, in this section, when I refer to for example, three participants, this means three out of sixteen.

Others without experience of ADHD (018 and 095) did not mention it as a diagnosis for John. Participant 018 (47 years old, GP) who was interested in bipolar disorder suggested it for the vignette and was sceptical about ADHD even for children, (see sections 6.2.3 and 6.2.7). Participant 095 (43 years old, psychologist) who usually worked with personality disorder and schizophrenia, viewed the vignette in this light and although s/he frequently observed attention problems in his/her clients, s/he attributed them to other conditions such as schizophrenia (see section 6.2.3). In these two cases, it is possible that the participants have been in contact with potential adult ADHD patients, but had viewed them as other conditions. Therefore, the absence of experience in these cases could be justified by the clinicians' perception. Participant 139 (39 years old, psychiatrist) explained this point:

"I need to be aware of the existence of this <adult ADHD>, to think about it. The eyes don't see it, if the mind is blank."

In my observation, however, 'the mind' of participants was not actually 'blank', it was directed towards other concepts and definitions.

For participants 157 and 139, whose attitudes were altered by experience, there was another person, the patient or a senior colleague, who insisted on the diagnosis of ADHD. Otherwise, exposure to adult ADHD might have reconfirmed pre-existing schemas.

In this section, I observed that experience could have different effects on the perception of participants. If participants observed successful

treatment of an ADHD patient, they developed a favourable opinion towards diagnosis and treatment of the disorder. However, if they observed that the client did not benefit from the treatment, they considered treatment of ADHD to be generally not effective.

As a conclusion, in some cases participants justified their knowledge by what they claimed to have observed, and in other cases their observations could be justified by their knowledge and areas of expertise. Overall, it is evident that personal experience has a profound influence on clinicians' perception and approach and the confidence with which they make a judgement, in a way that it might override the knowledge that clinicians are expected to acquire thorough academic literature. Those participants had built their estimation on the success rate of a treatment for ADHD based on their first experiences. This is an example of 'adjustment and Anchoring heuristic' that was introduced by Tversky and Kahneman (1974, p 1128) as:

"People make estimates by starting from an initial value that is adjusted to yield the final answer ... That is, different starting points yield different estimates, which are biased toward the initial values."

6.2.2 Awareness

“I’m less aware of how ADHD symptoms show themselves in adults”

Only four participants⁴⁷ were confident in their knowledge of a diagnosis of adult ADHD from the vignette. Participant 105 (55 years old, psychiatrist) was educated in another country and described the vignette as a typical case of ADHD. Participant 150, (45 years old, psychiatrist) worked in specialist mental health care and received referrals from other psychiatrists. S/he named different rating scales for the diagnosis of ADHD and stated that:

“I thought it was quite a good vignette... If I wanted to describe adult ADHD, this would be pretty close to how I see it”.

Ten other participants implicitly or explicitly acknowledged lack of awareness in this area. For example, participant 060 (33 years old, psychologist) said:

“One reason I found this <vignette> difficult is I’m less aware of how ADHD symptoms show themselves in adults”.

In section 2.2.1, I referred to Kewley (1998) who claimed possibility of ‘myths’ and ‘misinformation’ regarding ADHD. Following discussion refers to a similar concept.

⁴⁷ Participants 105, 150, 139, 157

Participant 113 (43 years old, psychiatrist) ruled out ADHD in John, because he was a university student:

“But for this chap, in terms of the adult ADHD, it doesn’t fit in for me, because he is a 22 years old university student. If he had got adult ADHD, I wouldn’t think that he would be able to concentrate enough to perform to get to university. And that’s why I tend to dismiss it.”

In this case, ADHD was rule out based on the assumption that it could not be found in university students, while university attendance is not exclusion criteria for ADHD and participant 157 reported contrary in section 6.2.1. In addition, There are literatures that indicate although ADHD could cause academic difficulties; it is diagnosed in university students and academics (Weyandt and DuPaul, 2008).

In addition, it seems that not only ADHD is attributed to university students in some occasions, but also it might be identified in clinicians, as participant 114 (62 years old, psychiatrist) suggested existence of the condition in him/herself⁴⁸:

⁴⁸ In the written reply to the vignette-related questionnaire

“I am (or was) a bit that way <like the vignette, that was diagnosed ADHD by the participant> myself at John’s age. I got bored at university, sleeping in lectures (especially near lunchtime), rushing my dissections, and anticipating the results of practicals, which therefore always seemed rather purposeless to me. I had to study hard on my own to cover the theory and I had to pull out all the stops in practical exams to fool the examiners ...you are the person I have told this to.”

Some authors of books on ADHD have made similar claims, for example. Dr Hallowell explains his experience:

“I have attention deficit disorder (ADD). I discovered I had ADD when I was thirty-one years old, near the end of my training in child psychiatry at the Massachusetts Mental Health Centre in Boston. As my teacher in neuropsychiatry began to describe ADD ... I had one of the great “Aha!” experiences of my life.” (Hallowell and Ratey, 1994, p ix)

Therefore, it was remarkable how clinicians could have different understandings of a unique disorder. On the one hand, some health care professionals such as Dr Hallowell have translated guidelines of ADHD into a schema that is attributable to them; on the other hand, one of the

participants translated it into a different schema that is incompatible with higher education.

In addition to different interpretation of disorders, awareness of the ‘right’ guideline for diagnosis of ADHD could be also important. I checked this during the interview and found that only participant 150 (45 years old, psychiatrist) referred to the Utah Criteria. In addition, as mentioned in section 2.2.1, ICD-10 only includes guidelines for diagnosing childhood ADHD (hyperkinetic disorder). Similarly, participants 139 and 150 referred to that point, however, participants 112 and 147 suggested ICD-10 in relation to adult ADHD.

In conclusion, it seems from the data that knowledge and familiarity with the concept of adult ADHD have a crucial role in suggesting the disorder. This analysis has also identified particular misconception about adult ADHD that it is incompatible with higher education.

6.2.3 Favouring overlapping disorders

“Certainly we find that within a bipolar-type scenario”

For five participants, the main reason for not considering ADHD seemed to be diagnosing a different condition for the vignette. For example, participant 018 (47 years old, GP), who suggested bipolar disorder for the vignette, explained that:

“The other good thing that I am doing at the moment, is I am doing actually a lot of on-line or internet based continuing medical education activity to ...⁴⁹ targeting adolescent depression and bipolar disorder.”

S/he frequently used the example of bipolar disorder to explain different aspects of the discussion and when reading the vignette s/he attributed different bits of it to the bipolar disorder:

“He <John> used drugs and certainly we find that within a bipolar type scenario... We’ve got the issues here of reckless driving, gambling, impulsive buying - that may well represent episodes of mania or hypomania ... Financial problems, we see quite clearly in a bipolar-type scenario.”

S/he also described occasions that s/he had disagreed with the psychiatrist on diagnoses of bipolar disorder (as mentioned in section 5.4.1).

Participant 095 (43 years old, psychologist) who worked with patients with diagnosis of schizophrenia tended towards a diagnosis of schizophrenia while talking about the vignette, justified his/her inclination by introducing it as something that often happen and is related to the importance of schizophrenia:

⁴⁹ Name of the country is deleted.

“My view of ADHD is: it is often quite a hidden condition, and because there is a primacy of thinking that relates to the schizophrenic dimension, difficulties are often thought to be a manifestation of a schizophrenic illness. So even if you’ve got ADHD, then schizophrenia seems to be that much more important underlying illness”

These examples illustrated the concept of favouring a disorder. There are guidelines for how to differentiate ADHD from similar conditions; however, in the mentioned cases, participants ‘saw’ the vignette as one of the overlapping conditions in a way that they did not mention ADHD at all. Favouring an overlapping disorder was the main explaining factor in the ‘did not mention ADHD’ group.

6.2.4 Work setting

***“I see it as personality disorder,
because I work with personality disorder.”***

By work setting, I mean the employment context of the participants. At the beginning of the interviews, I asked participants about the place that they worked in and the usual clients that they visit.

There were similarities between participants’ usual clients, and their ideas about the vignette. Participant 060 (33 years old, psychologist) worked with patients with physical health problems such as head injury and

suggested brain injury for the vignette. Five other participants⁵⁰ worked in forensic settings, mainly with people with a diagnosis of personality disorder and they suggested this diagnosis for John. It seems that work setting is related to favouring overlapping disorders, which I explored in the previous section. Participant 056 (33 years old, psychologist) referred to this point him/herself:

“I recognize that I see it <the vignette> as personality disorder, because I work with personality disorder.”

The work setting could inform the participants’ perception and approach in other ways as well. Participant 113 (43 years old, psychiatrist), worked in a drugs clinic, where the clients often have multiple diagnoses, and s/he similarly offered a list of diagnosis for the vignette. Participant 139 (39 years old, psychiatrist) worked in a crisis centre, where they used formulation to approach the clients, and s/he also applied this method in his/her approach to the vignette. Work setting was one of the most influential factors, only surpassed by awareness levels.

Therefore, the reference-knowledge that clinicians use for evaluation of clients is not only developed through formal educations, but also work settings. Participant 112 (50 years old, forensic psychiatrist) explained this

⁵⁰ Participants 056, 095, 112, 138, 147

situation:

“An analogy which we might want to appreciate ... talking on pure physical diseases like rubella, they do not generally go to hospital and the hospital-based physicians don’t have a lot of experience of measles, mumps or rubella conditions, because they are always dealt with by GPs. And similarly with ADHD, if they are dealt by educationalists, GPs, or adult ADHD specialists, then general psychiatrist or child psychiatrist won’t see them, because they deal with different types of problems. So it might be a problem actually, because as a forensic psychiatrist, I come across people similar to the vignette that you presented, but I tend to be blind to the possibility of ADHD, unless extreme; and I don’t see any extreme case.”

Participant 056 (33 years old, psychologist) has also acknowledged role of expertise in causing tunnel vision and suggested a solution for it:

“It’s very easy to see people grow over area of expertise which is why judgments should be based on through multidisciplinary assessment”.

However, it is not clear to what degree such a solution could be successful, because if the multidisciplinary team consist of professionals with different backgrounds working in a similar work-setting, gradually they might be influenced by their work-setting and develop similar sets of reference-

knowledge.

I observed participants favoured a particular type of diagnosis based on their recent trainings (section 6.2.3) or their usual type of clients (section 6.2.4). Participants considered the favoured diagnosis to be more common, which means they judge the prevalence based on their personal experience (Harold et al., 1988). For example, participant 112 (50 years old, forensic psychiatrists) mentioned:

“I want to exclude the issues that I have highlighted, which in my experience are quite common ... ”

The participant did not mention that s/he will check the items that are more probable based on statistics (agreements), but s/he perceived the prevalence based on his/her own experience. In this way, the participant legitimated giving priority to the items that are well known for him/her. This reliance on self-experience could happen despite the awareness of literature. For example, as mentioned in section 5.4.5, participant 112 (50 years old, forensic psychiatrists) mentioned that s/he believed prevalence of ADHD is less than what is mentioned in literature and:

“... therefore I don’t recognise it, I don’t see much of it”

In this example, the participant is aware of the fact that he is diagnosing ADHD less than suggested rates in literature, but s/he rejected the literature, instead of changing his/her practice.

Participants in those occasions could have biases towards some disorders by relying on available information to them, and estimate a higher prevalence for those disorders. This is 'availability heuristic' as suggested by Tversky and Kahneman (1974, p 1127):

"Situations in which people assess the frequency of a class or the probability of an event by the ease with which instances or occurrences can be brought in mind."

6.2.5 Uncertainty towards psychostimulants

"It's a potentially lethal drug, with no proven benefit"

In section 5.3, participants conceptualized importance of diagnosis in its role in selection of the treatment and management. Depending on how they viewed the treatment of ADHD, they might be more or less likely to consider a diagnosis of ADHD for a potential patient. Therefore, I explored participants' attitudes towards psychostimulants, drugs that are used in treatment of ADHD.

Participant 112 (50 years old, forensic psychiatrist) stated that s/he

does not prescribe Ritalin, and acknowledged social difficulties in prescribing this drug:

“The other problem is that Ritalin being a soft substance and could be abused by patients that are being prescribed to. They will sell it to other people who are currently in prison.”

Similar points convinced participant 113 (43 years old, psychiatrist) to avoid these drugs, and adopt a ‘safer’ choice:

“The thing is about prescribing controlled drugs, you have to be very, very careful of the drugs having potential of misuse, getting in the wrong hands ... I mean in terms of prescribing amphetamines to somebody, we don’t do it very often at all. Very rare; and if I see somebody with adult ADHD, I probably go on prescribing something like Atomoxetine, which isn’t thought to be a drug of misuse. It is a safer drug to prescribe.”

Participant 112 worked in a forensic setting and participant 113 worked in an addiction clinic and although they frequently observed symptoms of ADHD in their clients, they did not frequently diagnose ADHD and they have almost never used psychostimulants, due to concerns for abuse and/or trade of these substances.

In addition to the abuse and trade potential of psychostimulants, side effects of the drugs are also another source of concern. Participant 152 (53 years old, GP) was pessimistic about biological dangers of Ritalin for adults:

“And particularly with recent reports, Ritalin has been associated with an increased risk of premature death due to cardiac abnormalities, you will be putting yourself at a huge risk as a GP, if you prescribe Ritalin to somebody where a specialist hasn’t weighed it up and say that the risks are out-weighed by the potential benefits ... there is no scientific evidence about how long you should take this <Ritalin> for. The research isn’t there to know whether it is beneficial or not. And that’s one of the reasons why people are reluctant to set up a service, because there is no scientific evidence to know what to do with these people <adult ADHD patients> ...we don’t know if it is safe or beneficial to continue drugs like Ritalin into adult life... it’s a potentially lethal drug, with no proven benefit”

Finally, three participants⁵¹ referred to practical difficulties for prescription of psychostimulants. They mentioned that the drug is not licensed for adult ADHD patients and as participant 152 (53 years old, GP) explained, its prescription is risky for clinicians:

⁵¹ Participants 105, 139, and 152

“With the licensed drug, if you are using it according to the licence, if it kills somebody, it’s the manufacturer’s fault. If you are using it off-licence, if it kills somebody, it’s the doctor’s fault.”

This is a practical restriction; however, a strategy to overcome this problem could be referring clients to a specialized person or centre to have a confirmation for the diagnosis. Participant 105 (55 years old, psychiatrist) preferred to depend on others for decision making in diagnosis and treatment of ADHD in adults, due to attributed problems of Ritalin:

“It is a medication that has potential for being abused; it is a stimulant, so I won’t prescribe it, that’s one of the reasons for potentially referring these patients to an adult ADHD unit,... the Maudsley unit, for example, will start medication, and ... I continue with the prescription.”

This may indicate the importance of availability of such a centre or person and awareness of clinicians of existence of such facilities in diagnosis. I asked the participants about their awareness of specialized person or centre on adult ADHD. Five⁵² named two consultant child psychiatrists, who are interested to

⁵² Participants 060, 113, 117, 127, and 150

ADHD in the Nottinghamshire; and four⁵³ were aware of adult ADHD centres in London.

However, four other participants⁵⁴ were not aware of any specific person or centre for adult ADHD referrals. For example, participant 152 (53 years old, GP) not only believed Ritalin is very dangerous, but also was convinced that, for the same reason, nobody else in the UK will prescribe it for adults:

“...we know it’s statistically associated with sudden death in people who take it, and therefore you are not going to find anybody, I don’t think, who is going to prescribe it in the UK”,

In general, if a clinician has concerns of abuse, trade or biological side effects of psychostimulants, and is aware of the fact that the drug is not licensed for adults; but is unaware of any other person or centre to refer the client to it, then there would be no chance for administration of these drugs. It is also notable that with no access to the specific management, offering the diagnosis might seem to be pointless for some clinicians. Likewise, participant 152 (53 years old, GP) suggested:

⁵³ Participants 105, 113, 139 and 157

⁵⁴ Participants 058, 138, 147, and 152

“That might be very disappointing for them <adults with ADHD> and one of the reasons not to make a diagnosis initially is that you need a relationship and a safety net, if you are going to give bad news; and if they come to you for Ritalin, then you are going to have to give bad news to them: that you can’t give it to them.”

In this section, I observed that some participants perceived the risk of stimulant drugs higher than the probability suggested by literature. I suggest a hypothesis that this perception could be related to imaginable risks being portrayed in media. This is another sort of ‘availability heuristic’ that Tversky and Kahneman (1974, p 1127) introduce. It could be possible that a non-technical narrative on amphetamine-related death make sense and be remembered much more easily than larger number of scientific articles suggesting otherwise. As mentioned in chapter 2, I evaluated web pages and although I found 90% of my sample of web pages confirmed medical model of ADHD (Sarrami-Foroushani, 2008), the few pages that display concerns on drug therapy might be more retrievable and more effective for some clinicians. This idea is supported by Rafalovich (Rafalovich, 2005) and Kewley (1998) who argued that media could make uncertainty in the clinicians in management of ADHD.

Therefore, although medical model of ADHD might mainly support drug therapy, clinicians could have different attitudes and avoid providing diagnosis and treatment for potential ADHD patients, even despite their demands (Furedi, 2006). For that reason, despite the well-known discussions of

compliance and concordance, in which it is usually assumed that patients are unwilling to consume drugs, even if patients with a diagnosis of ADHD actively ask for drug-therapy (Sarrami-Foroushani, 2007a), they might face resistance of clinicians (Sarrami-Foroushani, 2007b) as participant 152 (53 years old, GP) suggested.

6.2.6 Working based on formulation

“We don’t diagnose, we formulate.”

In four cases⁵⁵, I justified the reason of participants for not suggesting ADHD by the fact that they established their approach on formulation, which was conceptualized and introduced in a variety of ways.

Participant 117 (67 years old, psychiatrist) introduced formulation as a wider approach that includes diagnosis:

“I think that making a one word diagnosis is not helpful in psychiatry any way. I think you have to make a formulation which includes the diagnosis”.

⁵⁵ Participants 058, 095, 117 and 139 were in either ‘considered ADHD’ or ‘did not mention ADHD’ groups.

Participant 095 (43 years old, psychologist) also considered formulation and the diagnosis related to each other:

“The ability to make a diagnosis can be informed by the formulation and they are linked together and I think I wouldn’t want to make them be seen as if they are separate entities, as often they do run along side of each other and they are linked.”

Therefore, s/he justified application of formulation by referring to its advantages and existing social obligations:

“So we would help in developing a formulation which starts from an earlier period in his life, because some of these presenting issues which you understood as attention deficit hyperactivity could actually stem from earlier experiences, he <John> may have learnt to adapt in a way that is not helpful... In our training, we are trained to do case formulation and in continuing professional development, we continue to go on subsequent courses...we have to be assessed on our capacity to do it.”

Another influential factor in selection of formulation appears to be the work setting. Participant 139 (39 years old, psychiatrist), who worked in a crisis centre, explained that s/he has to use formulation because of the urgent

situation of the clients and s/he would not concentrate on the diagnosis in the initial stages of the contact with the clients.

“If this <the vignette> is the first presentation, then I would rather go for formulation, rather than giving a diagnosis straight away. Because the formulation will capture all the uniqueness and the essence of the client. And then because you work it about as a team, we can then allocate appropriate people, to target them ... If I’m giving one <client> antidepressant, it could take actually some weeks to work. Minimum five days to work. But in the five days, you can persuade him to bring some structure in his life ... look at a list of problems, find solution to the problems ... these can be done from the day one.”

However, participant 139 (39 years old, psychiatrist) explained that s/he prefers formulation in a way that it could substitute the diagnosis in some cases, as mentioned in section 5.3.

Other than advantages of the formulation, role of training and the work setting, I still come across other reasons for application of formulation.

Participant 058 (43 years old, psychologist), who was in the ‘did not mention ADHD’ group, found it hard to suggest a diagnosis for the vignette, and preferred providing formulation:

“I don’t really understand diagnosis as much as I hoped to with John. I’m finding it difficult to suggest a particular diagnosis...I do it on a sort of act that you call formulation”

Therefore, formulation could be potentially a way for dealing with uncertainty. In addition, participant 060 (33 years old, psychologist) referred to the acceptability and prestige of the formulation. S/he had the personal experience of some other psychologists who referred to formulation as a privilege for their profession:

“I think that sometimes people have an image about psychiatrists, that they’re over keen and over single-minded in diagnosis; and so I would really celebrate that we don’t do that and do this <formulation> and we, psychologists, do things more broadly...you might come across some psychologists, who really want to emphasize ‘we don’t diagnose, we formulate.’”

In summary, application of the formulation was adopted by some participants, because it could be helpful and effective and has some advantages, is learnt during the education, might be the necessity of the work-setting, could be a way for dealing with uncertainty, and finally because it could be an acceptable and prestigious position. In any case, the fact is some participants used this

method and some did not, and therefore adoption of the formulation was a source of variation in the participants' perception and approach.

6.2.7 Debates on validity of ADHD

“Attention deficit disorder is just basically an unruly kid”

Participant 018 (47 years old, GP) doubted the validity of ADHD in childhood, and believed that in many cases the problem is not a biological disorder:

“I’m wondering how much attention deficit is actually over-diagnosed. Yes, I think there is an issue around there. But being a parent myself, I can very much see the difference in kids who eat well, have structure, and have a decent bed time ... I am wondering how many times attention deficit disorder is just basically an unruly kid who is having a terrible diet and a very poor sleep pattern. So I am very wary about attention deficit”.

Participant 018 was in the ‘did not mention ADHD’ group. Given that s/he was cautious about ADHD in childhood, it is not surprising that s/he did not suggest ADHD for an adult client as well.

Three other participants⁵⁶ considered ADHD a rare condition, which is why they were reluctant to diagnose it in John.

“I think again, although there is history of ADHD as a child, the difficulty that I have in terms of saying this is adult ADHD is that, it still has its controversy; or if it is there, I think it is fairly rare”. (Participants 113, 43 years old, psychiatrist)

Above participant who believed ADHD is a rare, also suggested the idea of over-diagnosis of ADHD. Such a perception indicates hesitation for offering the diagnosis of ADHD, which could lead to ‘under-diagnosis’ of the condition.

Participants in sections 6.2.5 and 6.2.7 indicated uncertainties on the validity of ADHD as a diagnosis and safety of psychostimulants. The existence of those uncertainties could be viewed in two ways: Firstly, uncertainty of participants on validity of ADHD could lead them to not use this definition as reference knowledge and so they do not make that diagnosis. Secondly, uncertainty could be a way for managing the uncomfortable situations. Examples of such situations could be prescribing high risk drugs or offering less familiar diagnoses (Davis, 1960).

⁵⁶ Participants 113, 147, 138

6.2.8 Professions

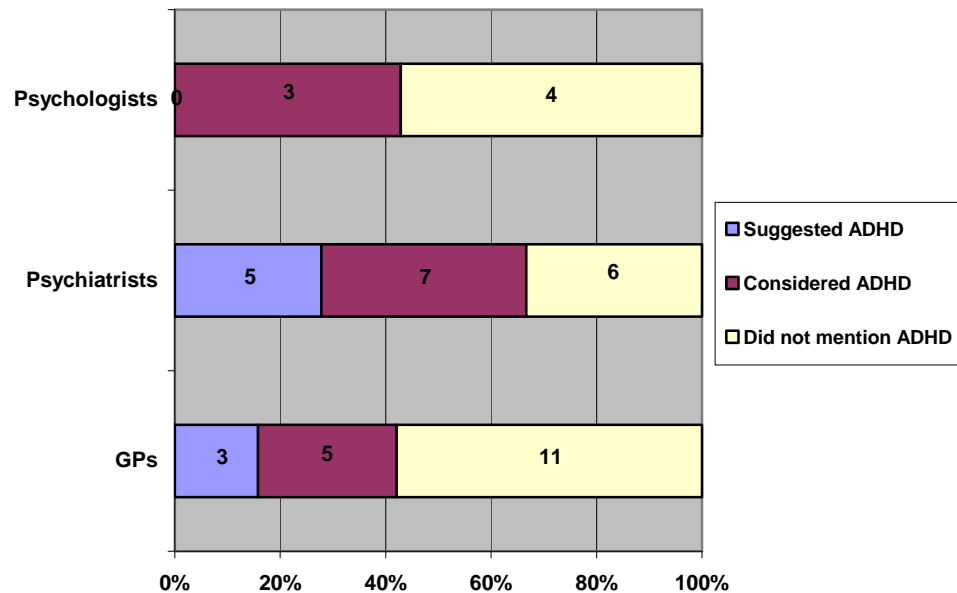
“I don’t think the GPs diagnose adult ADHD⁵⁷”

The profession of the participant, i.e. being a GP, psychologist or psychiatrist, could affect both training and work setting. In section 5.4.1, participants explained the role of training in the clinicians’ perception and approach; especially participant 105 (55 years old, psychiatrist), who was trained in a different country, and justified his perception and approach by his training. In section 6.2.4, I observed that work setting could affect the participants’ perception and approach. In section 5.4.1, participant 113 (43 years old, psychiatrist) initially suggested GPs would not be able to diagnose ADHD, but then acknowledged the possibility of individual differences due to different special interests and educational courses.

Therefore, I was interested to explore the existence of difference between participants from different professional groups in their general perception and approach towards the vignette. I used the demographic data of 44 replies to the vignette-related questions.

⁵⁷ Mentioned by Participant 139 (39 years old, psychiatrist)

Figure 6.2 Comparison of general perception of the vignette in different professions.



The results indicates that no psychologists, 16% of GPS and 28% of psychiatrists suggested ADHD and 43% of psychologists, 26 % of GPs and 39% of psychiatrists considered ADHD. The majority of psychologist (57%) and GPs (58%) did not mention ADHD, but only a minority of psychiatrist (33%) failed to mention the possibility of this diagnosis. It is interesting that although four participants⁵⁸ anticipated that GPs would not be able to diagnose adult ADHD, three GP participants⁵⁹ (16% of GPs) suggested ADHD as John's diagnosis.

The observed difference between GPs, psychologists and psychiatrists was not statistically significant (Fisher's exact test, $p=0.42$). However, it is necessary to explore role of profession in a larger randomized sample, while

⁵⁸ Participants 060, 113, 139, 150

⁵⁹ Participants 024, 155, 157

considering the role of different factors, such as experience and individual interests.

6.2.9 Age

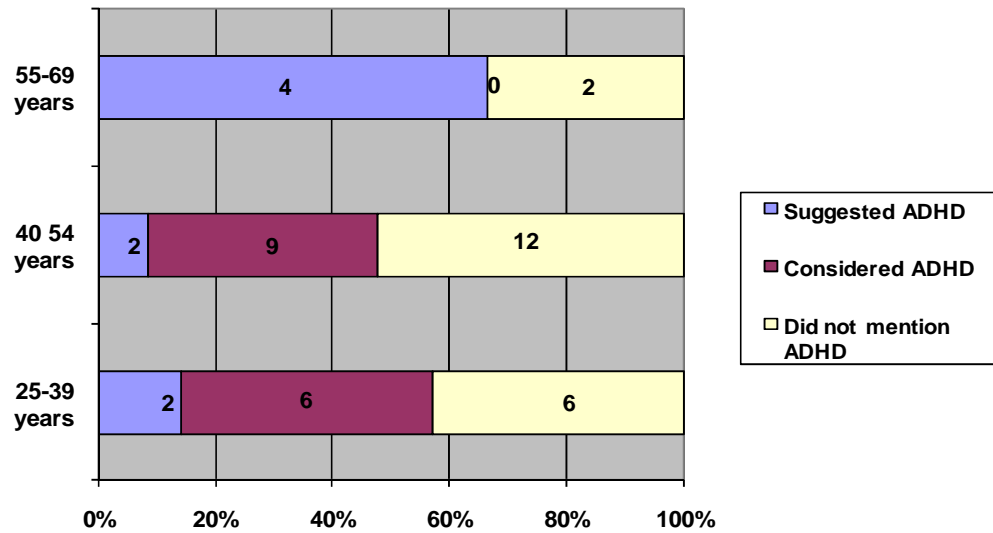
“An older GP... might not be interested”

As mentioned in section 5.4.1, participant 018 (47 years old, GP) suggested that clinicians of different ages might have differ in their approach to ADHD.

Therefore, I used the demographic data to explore this hypothesis. The range of age of participants was from 28 to 67 years old (Average: 44.7, N=43⁶⁰). I divide them in three groups of younger (25-39, N = 14), middle (40-54, N=23) and older age groups (55-70, N=6).

⁶⁰ One of the participants did not disclose his/her age.

Figure 6.3 Comparison of general perception of the vignette in different age groups.



The results indicates that while only 14 % of younger and 9 % of middle age group suggested ADHD, 67% of older where within this group. In the younger group, 43% were in the 'did not mention ADHD' group and 52% and 33% of middle and older were in this category. Proportion of participants in the 'considered ADHD' group decreased by age from 43% in younger to 39% in middle and 0% in the older group.

Fisher's exact test was conducted to compare participants with different age groups, and the observed difference was statistically significant ($p = 0.04$). However, because of the small sample size, there have been limitations on the quantitative analysis of data and the following proposed points have hypothetical value.

It is notable that older participants display a reduction in proportion of participants who 'considered ADHD'. This might suggest that by increasing the age, the amount of uncertainty is reduced and people gain firm ideas; for example to suggest either ADHD or other overlapping disorders (which was found more in the 'did not mention ADHD' group).

In order to check the relationship of uncertainty and age, I explored age of those participants whose replies regarding the main problem of John (section 4.1.1) and cause of problem of John were labelled as uncertain (section 4.1.2). 10 participants had shown uncertainty to at least one of those topics. Five of them were in the younger group and the other five were in the middle group and no one was in the older group (range of age: 30-50, average: 40.6).

Those observations could be confirmed in larger randomized samples.

6.3 Role of hermeneutical factors

In the chapter 5, participants suggested that behaviours and characteristics of humans could be understood differently (section 5.4.3), and there is no objective tool for diagnosing psychiatric disorders (section 5.4.2). Psychiatric diagnosis is mainly based on interpreting information that is gathered from the patients. This is related to hermeneutical factors as introduced in section 2.3.2, which suggest clinicians could interpret patients as a text. Therefore, I explored how participants have interpreted a similar bit of information

related to impulsivity related behaviours, which was mentioned in the vignette.

Impulsivity is one of the main symptoms for diagnosis of ADHD. Utah Criteria (UC, see Appendix A) describe examples of it, including following items, which were also included in the vignette:

“... Impatience (e.g., while driving); impulse buying ... Abrupt initiation or termination of relationships (e.g., multiple marriages, separations, divorces); excessive involvement in pleasurable activities without recognizing risks of painful consequences (e.g., buying sprees, foolish business investments, reckless driving); Subjects make decisions quickly and easily without reflection, often on the basis of insufficient information, to his/her own disadvantage.” (Wender et al., 2001, p 6)

Patients who consistently display those behaviours, in addition to other symptoms, could be diagnosed as ADHD. Therefore, it could be expected that the impulsivity-related descriptions in the vignette led some participants to consider ADHD or suggest it for John. In the following section, I explored my data to check how participants have interpreted the impulsivity related information.

6.3.1 Not picking up the behaviours

As it was suggested in section 5.4.4, in real settings, clinicians might be unable to access the same information. They might not check for impulsivity related behaviours or clients might avoid revealing them. Although, in this study, the information was presented to the participants, they could still pick up different bits of information. If they did not pick up information related to impulsivity, it could potentially be due to either lack of awareness; or it might be a result of paying attention to something more alarming. This phenomenon has been described by Wender (1995, p 136):

“...it is often the “squeaky wheel” that gets the interventional grease. These symptoms constitute the bases for referral and intervention while obscuring the underlying disorder, ADHD.”

However, in contrast to some aspects of ADHD that might be easily overlooked (such as attention difficulties), impulsivity related behaviours seem to be ‘squeaky wheels’. More participants directly referred to impulsivity compared to concentration problem (14 vs. 6)⁶¹ and perceived impulsivity as a more serious problem. Participant 060 (33 years old, psychologist), for example, perceived impulsivity as an important issue that could dramatically affect his/her clients:

⁶¹ According to list of main problem

“Perhaps because of issues around impulsivity, they just tend to things a lot worse than John maybe”.

Also participant 139 (39 years old, psychiatrist) was surprised of an impulsive person like ‘John’ being functional enough to be in university. However, acknowledging the importance of impulsivity does not mean it is regarded as a symptom of a mental health disorder. Participant 060 (33 years old, psychologist) suggested:

“If somebody has a head injury and <got> a lot of neurological symptoms <such as> impulsivity, does not mean he’s got a mental health problem”.

In the cases where participants did not pick up impulsivity-related behaviours, they might look at other symptoms, or ADHD-related features such as marital instability, academic and vocational failure, and substance use or potentially discharge the client without any intervention. I did not come across any participant who suggest the latter option; however, as mentioned in section 4.1.1, five participants did not refer to any particular disorder, and even in one occasion suggested “normal growing up” while, at the same time, recommending psychological-behavioural treatments.

Therefore, in this section, I observed that participants might do not pick up a particular piece of information, such as a symptom of ADHD. This implies that one of the sources of variation is possibility of overlooking some information by clinicians. Alternatively, they might consider the information,

but do not perceive it abnormal, which might indicate lack of related reference-knowledge, or uncertainty towards a particular reference-knowledge.

6.3.2 Direct approach to the behaviours

Participant 138 (42 years old, psychiatrist) identified impulsivity as the only explanation for John's problems, without considering it as a symptom of any other psychiatric disorder. Participant 076 (32 years old, psychologist) also referred to impulsivity. However, s/he did it along with other psychiatric diagnosis or some non-specific conditions. S/he described the main problem of John to be:

"Poor attention concentration, ADHD?, Poor self control, impulsivity = Disinhibition, disorganization, Anxiety?, Poor coping skills, anxiety⁶²."

In some other cases, impulsivity was explained by other factors, such as substance misuse (participant 058), or excessive caffeine consumption (participant 138). In these occasions, impulsivity is picked up as a problem, or as a situation caused by other items, but it is not viewed as a symptom of a disorder. In such cases, participants suggested approaching the 'problem' via formulation and counselling.

In this section, I observed that participants might directly approach an issue related to a symptom of ADHD without considering it as a 'symptom'.

⁶² Equal and question marks were written by the participant.

Application of formulation provides possibility of tackling the issue without diagnosis.

6.3.3 Considering behaviours as symptoms of other disorders

Participant 113 (43 years old, psychiatrist), paid attention to impulsivity and considered it as a symptom of a disorder, but not ADHD:

“... also the other bipolar symptoms: difficulty in self control, being reckless, gambling, sexual behaviour, impulsivity, all those types of things are typical features of somebody manic really”

Participant 056 (33 years old, psychologist) associated impulsivity and some other symptoms such as attention difficulties, with borderline personality disorder:

“reading through <the vignette>, there seem to be difficulties with impulsivity, promiscuous behaviour and gambling, which I would associate with borderline personality disorder, similarly difficulties with attention, over-stimulation, suggesting difficulty in information regulation, which again I supposed... yes, borderline personality disorder would be the specific diagnosis”.

Participant 112 (50 years old, forensic psychiatrist) suggested that impulsivity could be attributed to personality disorder:

“all the other problems that you described, here are equally consistent with somebody who has a personality disorder, somebody who is sort of impulsive, somebody who is immature in personality, with antisocial personality may have problems in impulsivity and therefore difficulty of self control, recklessness, gambling ... and I don't normally consider those in ADHD.”

Therefore, in these occasions, impulsivity related characteristics are noticed as symptoms, but are used for diagnosing other conditions that have similarities with ADHD such as mood and personality disorders. Awareness of diagnostic criteria for ADHD and differentiation methods is important in these occasions.

In this section, I observed participants might perceive the information related to ‘impulsivity’ as a symptom of another disorder rather than ADHD. This situation could inform existence of competing definitions and/or uncertainty towards ADHD or lack of related knowledge.

6.3.4 Considering behaviours as symptoms of ADHD

Some participants considered impulsivity-related behaviours as symptoms of ADHD, and considered or suggested ADHD. The difference between suggested and considered groups could be explained in terms of the other factors

discussed in the previous sections of this chapter. The image of participants of ADHD patients (e.g. whether a university student can have ADHD), the acceptability of medication and availability of management options could affect the decision of the participants to move from 'considered ADHD' group to the 'suggested ADHD' one.

In this section, I observed that participants might exhibit ADHD related knowledge and perceive the piece of information as a symptom of ADHD. Then, according to existence of competing definitions and/or related social factors, they might move towards suggesting ADHD or considering it.

6.3.5 Relation of hermeneutical factors with other factors

In section 6.3, I compared interpretations of participants over a similar piece of data and observed that the participants interpreted the similar data differently. Hermeneutical factors could be related to the variation in perception of participants regarding the main problem/diagnosis (section 4.1.1), the overall position of participants towards the vignette (section 4.2), and other underlying factors of variation.

I have illustrated the relationship between hermeneutical factors and other items in diagram 6.4. According to this representation, it is understandable why despite the fact that participants received similar information they exhibit different perceptions and approaches. It is notable that the illustration particularly explains the variation that I observed in the

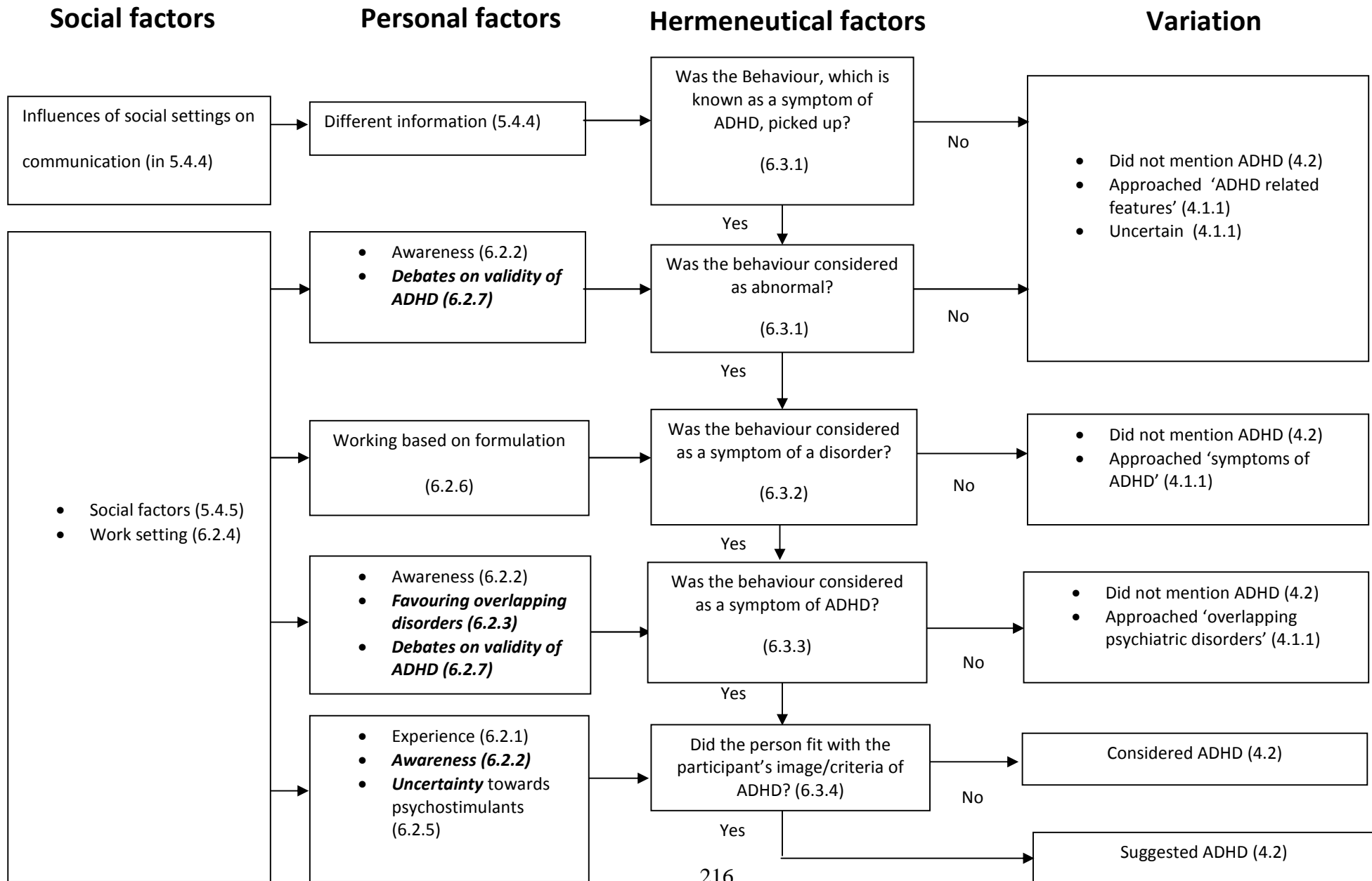
participants' perception and approach towards *impulsivity*, which might be different from the overall perception of the vignette. Participants might have approached different pieces of the vignette simultaneously, and consequently construct different perceptions as observed in section 4.1.1.

I have presented hermeneutical factors in the diagram 6.4 as an algorithm, which guides a clinician towards various possible outcomes. That is not, of course, a suggested decision tree; but is an illustration of implicit mental activity that potentially could happen during the process of diagnosis.

Moreover, diagram 6.4 include other personal and social factors that I encountered in this study such as experience (section 6.2.1), awareness (section 6.2.2), influence of social settings on communication (in section 5.4.4), and work-setting (section 6.2.4).

It is notable that those factors are highly related. The diagram 6.4 illustrates both an independent relationship between each layer of factors and the variations; and the relationship between Social, personal and hermeneutical factors with each other. For example, 'influences of social settings on communication' could be directly related to not mentioning ADHD or it could be viewed related to the personal ability of clinicians to retrieve 'different information'. It is remarkable that hermeneutical factors seem to have a central role; since the influence of other factors on the process of diagnosis are mediated through hermeneutical factors. According to the hermeneutical factors it is possible to explain how characteristics of the observer, such as their experience, intellectual position and professional background, could have effect on the clinical observation.

Figure 6.4 Overview of underlying factors of variation in participants' perception and approach towards a symptom of ADHD.
Numbers refers to the related sections.



6.4 Discussion

In this chapter, I attempted to answer the second research question that enquired about underlying factors of variation in clinicians' perception and approach towards people with mental disorders. When I designed my research questions, I had some predetermined idea about possible underlying factors and indicated my interest for their exploration in the third to sixth research questions. Some of these factors remained as important contributing factors throughout my analysis, such as awareness of clinicians. However, the analysis was driven by the data, and many concepts emerged as I performed the research and analysis.

In chapter five, I explored accounts of the participants on underlying factors, including differences in clinicians, nature of disorders, and nature of diagnostic methods. I explored those factors in this chapter; however, I could not confirm some of them. For example, I could not verify existence of a meaningful difference between professions (i.e. GPs, psychologists and psychiatrists). It might be related to the complexity of factors that contribute in development of perceptions and encourages further investigations.

The complexity and interactions of the underlying factors was observed frequently. For example, although experience of facing ADHD patients changed the position of some participants, in other cases, although there was the experience of observing potential ADHD cases, due to unsuccessfulness of the treatment, the attitude of participants was not changed, suggesting that alteration of the participants' perception is dependent on the outcome of the observed case. In other occasions, the

position of the participant was justified better by other factors than the experience. I interpreted the fact that they were treating an adult ADHD patient, or considering a person as potential ADHD patient, as the manifestation of their position. In another example, awareness seemed to be an underlying factor for the position of the participants. However, the participant's position was also related to other items such as work setting, education and experience.

In addition, I observed the important role of hermeneutical factors in variation in diagnosis and relationship of those factors with personal and social factors. However, existence of interpretation and variance in perceptions do not mean all options are equal. As participants also mentioned (section 5.3), it is possible that different perceptions lead to approaches that help or harm a client. Leder (1990, p 10) also suggested:

“Medicine is interpretive in nature hardly implies that all clinical interpretations are equally valid. Hermeneutics ... can serve as a structured discipline with teachable methods, canons of good and bad exegesis, ways of arriving at consensual validation. Such is surely the case with clinical diagnosis.”

Data of this chapter could have implications and indications for practical policies, as will further discussed in the conclusion chapter.

CHAPTER 7 : CONCLUSIONS

In previous chapters, I explored existing variation in participants' perception and approach towards adults with ADHD. Findings of this study not only contribute to theoretical knowledge of medical sociology, but also will have useful practical implications. I will discuss the most important conclusion of the study in the following sections.

7.1 Dependency of diagnosis on clinicians

One of the main recurrent themes in this study was the dependency of the diagnosis on clinicians. I noticed that social factors and personal characteristics of clinicians could affect the diagnosis via hermeneutical factors. As I mentioned in section 2.3.2, Leder (1990) consider clinicians as a co-author of the 'person-as-ill'. His notion implies that clinicians, similar to patients, have an active role in construction of the diagnosis. Similarly in this research, participants suggested role of clinicians in diagnosis (section 5.4.1) and I found some characteristics of the participants could affect their perception and approach, such as their experience (section 6.2.1), awareness (6.2.2) and work setting (6.2.4). Moreover, while I explored the concept of objectivity (section 5.4.2), I noticed that in psychiatry, like medicine, interpreting the clinical findings is based on clinicians. In addition, in

psychiatry establishing the existence of symptoms is also highly relied on clinicians.

Nonetheless, dependency of diagnosis on clinicians might be overlooked, particularly in positivist medical paradigms. For example, clinicians frequently refer to clients as 'cases' of disorders (e.g. John is an ADHD case), which fail to notice the people who has offered the diagnosis.

Without acknowledgement of dependency of diagnosis on clinicians, there would be only limited ways of understanding variation in clinical diagnosis. For example, as I mentioned in sections 2.2.1 and 2.2.2, there is considerable variation in prevalence of ADHD in different parts of the world and the best way of understanding the situation is according to dependency of prevalence on clinicians and diagnostic methods (Faraone et al., 2003). Consequently, the prevalence of mental health problems not only provides information regarding the patients, but also the clinicians.

As I mentioned in section 2.2.1, Mayes and Erkulawater (2008) suggested that by developing an agreement on definition of a mental health problems like ADHD, the rate of diagnosis, prevalence and related publications will increase. In addition, there could be a self-confirming cycle and the increase in prevalence, which could be resulted from the increase of 'knowledge', which might be used as an indication for the need for more knowledge, as Vlam (2006, p 18) argued:

“It is important to recognize that as ADHD diagnosis becomes increasingly more prevalent in primary care practice ... therefore, they¹ need to be more competent in the management of this disorder and have the knowledge and skill to evaluate, diagnose, and treat or refer each patient as necessary”.

7.2 Theoretical implications

In this study, I found that variation in clinical diagnosis could result from variation in different stages of education (section 5.4.1) and diagnosis (section 4.1.1). These stages correspond with institutional and patient-doctor levels in the theory of medicalization (section 2.2.3). Since clinicians have important roles in the medicalization process (Gabe et al., 2005), my investigation of clinical diagnosis has been able to inform relevant ideas and techniques of medicalization. More specifically, in this study, by exploring various perceptions and approaches that exist towards an adult with ADHD, I investigated existence of potential competing definitions for the condition. Conrad (1992) suggested that competing definition are among factors that have influence on the degrees of medicalization. In the following sections, I discuss how my observations could reflect competing definition in medicalization of adult ADHD.

My study emphasise on differences between medicalization of psychiatric disorders and medical conditions. In the following discussions, I

¹ Advanced practice registered nurses

suggest the possibility of some characteristics that are more prominent in the medicalization of psychiatric disorders.

7.2.1 Different types of competition

In chapter 4, I observed that competition could involve many different aspects of ADHD:

1. Participants considered different aspects of 'John' as his main problem, such as attention deficits, impulsivity, and disorganization. In those situations, the diagnosis is ADHD and symptoms are similar, however, the source of problem or the main 'pathology' of the disorder is different. Similarly, different authors compete over the main symptom of ADHD. Sadock and Sadock (2009, p 79) refers to different ideas that exists in this regards: "whereas in the past, hyperactivity was believed to be the underlying impairing symptom in this disorder, the current consensus that hyperactivity is often secondary to poor impulse control". While hyperactivity and impulsivity are discussed in that quotation, World Health Organization suggests (1992, p 262): "it is clear that from the point of view of behaviour, problems of inattention constitute a central feature of these hyperkinetic syndromes".
2. Participants, who suggested ADHD, had different grounds for their idea. Similarly, some authors suggest different symptoms for ADHD, such as "sense of impending doom " (Amen, no date), which is not

included in DSM. Therefore, competition could be over the symptoms and diagnostic methods.

3. Participants offered various ideas on aetiology and treatment.

Likewise, some authors emphasis on deficit of neurotransmitters as the main aetiology of ADHD, and therefore justify drug therapy; while others might insist on psychosocial aetiologies and treatments.

Therefore, perception on aetiology and treatment could be the basis for the competitions.

4. Finally, I observed that participants suggested different diagnoses for 'John'. Similarly, authors/clinicians might suggest different diagnoses for people with signs and symptoms of ADHD. In those occasions, although there might be similarities between symptoms, the diagnoses differ, like adult ADHD and 'addiction interaction disorder' that I illustrated in section 2.3.3. As a result, this competition might be concealed in contrast to previous types of competition. I will discuss this type of competition in the next section.

7.4.2 Hidden competitions

Competition in the medicalization process might be explicit and easily recognizable. For example, at the level of guideline definition, competition could happen over etiological hypotheses, diagnoses and treatment options. Those sorts of competition gather under the 'flag' of the same diagnosis. In these cases, advocates overtly compare options, and are aware of other

alternatives. There are articles that review different aetiological hypotheses, treatments and diagnostic options for ADHD (Wolraich et al., 2005, Daley, 2006, Valdimarsdottir et al., 2005).

However, by existence of ‘hidden’ competitions, I refer to the application of different diagnoses to similar clients, which are not necessarily acknowledged. In situations when this sort of variation is identified (section 5.2), it might be justified by the different information that the client might have provided (section 5.4.4).

The difficulty in detecting competition between definitions of clinical diagnoses for psychiatric disorders is related to lack of organic hallmarks and their dependency to language (hermeneutical factors). Therefore, it is possible that two definitions could be applied for the same ‘problem’ as I suggested for ADHD and addiction interaction disorder in section 2.3.3. Similarly, Bazar et al (2006, p 266) have suggested:

“Obesity and ADHD represent different manifestations of the same underlying dysfunction”.

By obesity, they referred to related behaviours and characteristics, which are like ADHD language-dependent. In another study, Oosterloo et al (2006, p 293) investigated: “the possibility of diagnostic confusion between hypersomnias...and the adult form of the ADHD”. And they found “high

percentage of overlap” between these conditions (p 296), and they claim as their research did not investigate patho-physiology of conditions, they could not make it clear whether the overlap between these disorders is “real”. They interpret this situation as “symptom overlap, comorbidity” and “diagnostic confusion” (ibid).

Therefore, whenever such competitions are acknowledged, they could be managed differently. For example, by replacing one category by another (e.g. replacing MBD by ADHD); or establishing agreements for differentiation (e.g. ADHD from BMD), or conceptualizing them as separate issues that could ‘co-morbid’ (e.g. ADHD and addictions). Again, as there is no language-independent criterion for diagnosis of disorders, modification of diagnoses and introducing differentiations are mainly via consensus and agreement.

7.2.3 Unintentional competition

Existence of medicalization could be attributed to the motivational factors of related agents such as the intention of clinicians to gain professional power and control (Southall, 2007, Conrad, 1992). However, this research reflects additional underlying factors for competition in medicalization and I explained the fact that participants interpreted a similar data differently according to the hermeneutical factors rather than motivation of the participants. Similar situation might exist in real settings and hermeneutical factors could play a role in addition to the economical and political factors.

Similar to my above argument, Tversky and Kahneman (1974) suggested that the application of heuristics are not related to motivational effects and it is not possible to correct them by encouraging and rewarding clinicians to be more accurate.

7.2.4 Variation in medicalization

In chapter 4, I found that a considerable proportion of participants indicate their hesitations towards drug therapy of 'John'. However, as Conrad (1992, p 211) suggested:

“Medicalization occurs when a medical frame or definition has been applied to understand or manage a problem”

Therefore, considering such a broader concept of medicalization, I did not observe any serious attempt of participants towards normalization of John. Participants suggested various medical/psychological explanations, solutions, and professional group for John (section 4.1). That observation confirms Conrad's (1992) claim that medicalization is not an either/or situation and the process could have various degrees.

In addition, an important point in my observation is the possibility of medicalization with various ways (hidden competition). I found that some

participants disagree with a diagnosis of ADHD, but they still medicalised the vignette and suggested different diagnoses for it. For example, the participant who displayed uncertainties towards childhood ADHD (section 6.2.7), suggested bipolar disorder for the vignette.

I did not explore factors that could bring people to the clinicians' office. However, if people enter the health care system, then my observation suggest to be or not to be medicalised, will not be the question, but the way of medicalization might differ.

7.2.5 Continuation of competition

Conrad (1992) introduces competition of definitions as a process that could affect the degree of medicalization and suggested:

“When competing definitions are represented by strong interest groups, ... , it is less likely for problems to be fully medicalised” (ibid`, p 220)

In addition, Conrad and Schneider (1992) suggested that the process of medicalization completes by establishment of clinical diagnosis. In this study, I observed various competing definitions for the vignette within the medical settings. Among suggested diagnoses for the vignette, there were well-established items, such as bipolar disorder and depression. Therefore, for

psychiatric disorders it might be possible that various clinical diagnoses continue their competition even despite their completeness of medicalization. In addition, ADHD has become a new competitor for depression and bipolar disorder. Therefore, competing definition could be introduced in different times, and two conditions, which are introduced in different decades, could compete with each other.

In conclusion, psychiatric diagnoses are dependent to language and hermeneutical factors, and therefore it is very difficult to avoid variation. Consequently, the competition implicitly or explicitly would continue. As I mentioned in section 2.4, variation could inform change; therefore, existence of continuous overt or hidden competing definitions might inform constant changes in psychiatric classifications, diagnoses and treatments.

7.3 Practical implications

7.3.1 Establishment of specialized centres

A basic point in relation to the medical model of ADHD is the existence of social, academic, and interpersonal difficulties in the lives of ADHD patients (Kewley, 1998). Although there was variation in perceptions of participants regarding drug therapy of ADHD, the medical model of ADHD suggest those treatments are safe, helpful and effective (see section 2.2). Medical authors claim that diagnosing and treating ADHD has improved the lives of many people and there are many more potential ADHD patients who need diagnosis

and treatment; however, criticisms of the medical model might deprive them of useful interventions (Timimi and Taylor, 2004).

Nevertheless, I observed in this study the existence of uncertainty towards ADHD and its treatment. In section 6.2.5, I noticed while clinicians could manage their uncertainties via referring the clients to specialized centres, there is not such a centre in Nottinghamshire and some participants were not aware of centres in other parts of UK. In addition, participant 127 (41 years old, psychiatrist) referred to growing children with a diagnosis of ADHD and therefore wondered if establishing a centre for adult ADHD in Nottinghamshire could be warranted (Young and Toone, 2000). In the following parts, as an example of practical implication of this study, I analyse such a policy.

Health care policy makers might expect clinicians to refer clients for which, they are not trained enough. However, clinicians occasionally might be unable to refer such cases, because they might 'see' them differently and do not feel the necessity of referral. For example, those participants who did not mention ADHD in this study (almost half of the participants), might not refer 'John' to an ADHD centre/specialist, if they encounter with clients who are similar to the vignette.

Another point regarding a specialised centre for ADHD is the amount of bias that such a centre might have towards the diagnosis of ADHD. It is an issue of future investigation. On one the hand, according to the role of work setting (section 6.2.4), clinicians who work in such centres might

'overdiagnose' ADHD. On the other hand, there are pessimistic accounts on drug therapy (sections 4.3, 6.2.5), and awareness of such positions might influence the approach of clinicians. However, according to the dependency of diagnosis on clinicians (section 7.1), the overall effect of presence of specialised clinicians could be increase in the rate of diagnosis and treatment.

7.3.2 Importance of objective diagnostic methods

In sections 2.2.2, 2.4.1, 5.4.1, and 5.4.2, I discussed the implications of having an objective measure to identify ADHD. An objective diagnostic method could embody the issue, confirm biological basis of the condition and might help in legitimating the whole process of diagnosis and treatment (Sarrami-Foroushani, 2007a). This suggests the importance of discovery or invention of a biologic method for diagnosis of ADHD. Claims of the invention or discovery of biological diagnostic methods for ADHD (Johnson, 2005, CnnMoney.com, 2007) are perceived as signs of shift in society from medicalization to bio-medicalization (Clarke et al., 2003). Similarly, as mentioned in section 2.2.1, Wender (1995) emphasised on the importance of biological methods in improvement of psychiatry:

"If we wish to make further progress in our understanding of these disorders, it is essential that they be broken down into homogenous subgroups. It is unlikely that we can expect much progress by refining our current techniques, observing more characteristics, attempting to group subjects on the basis of

symptom patterns, obtaining better and larger samples, or using new statistical techniques.

One cannot discover genetic entities on the basis of signs and symptoms alone, because of the danger of circular reasoning...

As science progresses, molecular genetics may hold the solution.”(p 117)

According to the above explanation of Wender, if a new definition could be linked to a biological entity, there would be substantial progress as it will enable researchers to have homogenous group of people that is essential for all sorts of research activities, and it will enable validation of diagnostic methods. However, it is notable that even if a biological difference is proven, calling the difference a ‘disorder’ is still a socially constructed phenomenon.

There might be considerable difference between conditions with an objective biological diagnostic method and those without it. The later conditions are totally dependent to language and prone to interpretation, variation and disagreements. For this reason, attempts toward establishing a diagnostic method for ADHD could be seen more than just providing facilitation of management: it could be directly related to the ‘identity’ of the phenomenon and our understanding of it.

7.3.3 Research-practice gap

The ultimate aim of clinical trials is to make improvements and changes in clinical practice. For example, The Collaborative Leadership in Applied Health Research and Care (CLAHRC) in the East Midlands, provided £17.4m for the Nottinghamshire Healthcare and The University of Nottingham aiming to ensure that:

“Research is focused on patients' needs and that findings can be put into practice more quickly to improve the care that patients receive”(The University of Nottingham, 2009)

However, there are different barriers in the application of research findings to the clinical practice, which are categorised as: “physician related, patient-related, and health system–related” (Rich, 2002, p 1321). Barriers that are related to physicians, according to Rich (2002, p 1321), include:

“lack of knowledge of the “best” current evidence, which is not surprising given the plethora of studies that have been completed, with new studies reported every week, as well as time constraints and the overriding desire to avoid iatrogenic complications”.

This position implies the possibility of unawareness, which I also encountered in this study (section 6.2.2). Above notion, suggest that lack of time and having particular desires are also the sources of the problem. My observations in this study suggest that the situation could be more complex for psychiatric disorders.

In section 6.2.2, I noticed the possibility of different schemas of a unique disorder. Therefore, it is possible that clinicians interpret a piece of research or a new guideline differently. They might develop different schemas of a new diagnosis, and they could have different understandings regarding the suggested treatments.

In addition, even if clinicians become 'aware' of new developments regarding a disorder such as ADHD, they might view clients differently (for example as patients of BMD), and therefore do not apply that particular knowledge. I suggest this possibility based on different parts of the study such as variation in participants' perception and approach towards the vignette (section 4.1.2), role of the cognitive set (section 5.4.1), favouring overlapping disorders (section 6.2.3), and hermeneutical factors (section 6.3).

Furthermore, similar to the above notion of Rich (2002) who refers to the role of desires, the discrepancy between the position of researchers and the clinicians might be related to beliefs and attitudes, rather than the knowledge. In chapter 5, I observed that attitude and account of participants in relation to the nature of psychiatry and psychiatric diagnosis was different from the formal positions. To explore this point, it is necessary to differentiate

between health care professionals who are clinicians, and those who are involved in the process of defining guidelines. Practitioners could have different beliefs comparing with policy-makers and they might have uncertainties about formal guidelines (Rafalovich, 2005) (see section 2.3.2) . Considering the notion of Conrad and Schneider (1992) regarding the authority that the power to define brings (section 2.2.3), policy-makers enjoy more power comparing to clinicians. Therefore, further analysis of the condition should consider this power relationship and it is necessary to understand the account of clinicians and the way they negotiate their position in the related power structures.

Finally, it may be useful to pay particular attention to ‘heuristics’ (Tversky and Kahneman, 1974), which I introduced in section 2.4.1. I found ‘representativeness heuristic’ (section 5.4.1), ‘adjustment and Anchoring heuristic’ (section 6.2.2), and ‘availability heuristic’ (sections 6.2.4 and 6.2.5) are relevant to the observed variation in the clinicians’ perception and approach. Clinicians’ heuristics could cause deviation from formal guidelines and instructions.

In conclusion, the points that I mentioned above, could produce concerns on the success of disseminating guidelines. Because whenever a new psychiatric disorder is introduced, clinicians might have different interpretations and beliefs regarding the new definition and also their work might be influenced by heuristics.

7.3.4 Variation in knowledge

In the study, I observed that perception of participants included various perspectives from the medical model (sections 6.2.1 and 6.2.2) and social perspectives (section 5.4.5) to anti-psychiatric positions (sections 6.2.5 and 6.2.7). Therefore, participants displayed various perceptions including all possible views that I introduced in chapter 2 (section 2.2) and the variation in their reference knowledge was beyond the medical model. Therefore, although clinicians are expected to use 'scientific' sources to develop their reference knowledge, it is possible that media, news or other sources have affected their reference knowledge.

Another source that could influence reference knowledge of participants was their experience (section 6.2.1) and their observation of the success/failure in treatment of an individual patient.

Therefore, similar to Leder (1990), who explained the role of clinicians in the process of diagnosis via their pre-existing perceptions, I found that participants could have different sets of reference-knowledge based on their various trainings, experiences and work-settings. Participants also provided a similar account and mentioned that clinicians bring their own understanding, knowledge, and experience to the consultation room (section 5.2). Therefore, variations in training, education and experience could lead to variation in reference knowledge and ultimately perception of clinicians.

Variation in knowledge and practice might be overlooked in part of the process, which was described by Leder (1990, p 21) as the 'flight from

interpretation'. However, by this study, I suggest considering and realizing the variation. As Baron (1990, p 28) suggested in relation to the subjectivity in medicine:

“Making sense of *that* in a positivist, secular culture seems to me to be the major task confronting medicine today. We are better guided by the humility of uncertainty than the shame of ignorance”.

Perhaps that shame lead to diagnostic certainty in psychiatry, where that certainty is not warranted due to the unavoidable variation. It is a topic for further investigations, as suggested and discussed in the next section.

7.4 Directions for future studies

This study opened up a number of separate lines of enquiry, which I will discuss in the following parts. In each one of the suggested 'roads', different methodological approaches could be adopted. Therefore, after introducing each enquiry road, I will suggest some methodological designs.

7.4.1 Diagnostic variation and the future of psychiatric diagnosis

In this study, I observed existence of variation in clinicians' perception and approach towards people with mental disorders. As discussed in section 5.5, the variation might be related to performance of the participants, and it might be argued that if clinicians followed the guidelines, the variation could be reduced considerably. On the other hand, variation might be related to more fundamental unavoidable factors, as discussed in chapters 5 and 6. In that case, existence of variation would reduce reliability of psychiatric diagnosis and as a result its validity (Fletcher et al., 1996). At the moment, there are some concerns on the current views of psychiatric diagnosis (Middleton, 2008) and existence of variation in psychiatric practice might point to a process of change in psychiatry, as discussed in section 2.3.3.

In the following paragraphs, I discuss some research designs to further explore existence of variation in clinicians' perception and approach towards people with mental disorders.

It would be possible to undertake studies similar to this one in different settings. It is notable that I am undertaking a cross-cultural study in Iran and I have translated the vignette and other research tools into Farsi, and using the snowball method, I have received replies from 20 Iranian clinicians (psychiatrists, psychologists, GPs) and performed interview with 10 participants. My preliminary analysis indicates comparable findings to this study. In addition, it would be possible to explore perception of other health

care professionals such as nurses, social workers, paediatrics, and see whether there is similar variation in their perception and approach.

In addition, it is possible to explore findings of this study via quantitative measures. It is feasible to develop a multiple-choice questionnaire that includes items that emerged in this study regarding adults with ADHD. It would be also interesting to use other 'cases' and to explore variation in clinicians' perception towards vignettes describing other psychiatric disorders.

The other approach could be exploring variation in 'real' practice of clinicians. Conditioned to availability of facilities, methods that I discussed in section 3.1 could be employed. For example, it is possible to explore variation in clinicians' perception over 'real' client. Alternatively, it is possible to have recording systems and follow-up facilities that investigate initial complaints, diagnosis, treatment, outcomes, and satisfaction of clients. In this way, it would be possible to monitor variations in health care and success rate of different approaches. This will provide highly valuable data.

Finally, in addition to the above research designs, which explored variation in psychiatric clinical settings, it is also important to explore existence of variation in educational settings as well.

7.4.2 Factors affecting psychiatric diagnosis

In this study, I explored underlying reasons of variation and come across to hermeneutical, personal and social factors (see chapter 6). Those factors could affect psychiatric diagnosis, and therefore they should be investigated

thoroughly. At the moment, there have been discussions on the factors that could affect psychiatric diagnosis and treatment (Middleton, 2007, Middleton and Shaw, 2007, Middleton, 2008) and the suggested framework in this study could facilitate future investigations. I have presented an example of such studies in the following paragraphs.

I acknowledged variation in reference-knowledge of participants in this study (see section 7.3.4), and suggested that knowledge of clinicians could stem in various sources in addition to the formal educations. Therefore, further investigations could be directed towards the source of knowledge of clinicians. As Middleton (2008) suggested:

“Given the limited part DSM/ICD play in clinical work, these references of competing and collaborating interests in shaping knowledge, and the fact that there are several legitimate ways of viewing ‘mental illness’, it is worth considering whose interests they do serve.” (p 11)

Therefore, it would be then helpful to analyse different sources (such as books, web pages, newspapers, scientific articles) and explore their attribution to medical, anti-psychiatry, and/or sociological positions. The ‘misconceptions’ could be also mapped in those various sources.

7.4.3 Clinicians’ perceptions

During this study, while I explored variation in perception of clinicians, I came across some sort of perceptions that merit further explorations. For

example, in chapter 4 (see section 4.3) and chapter 6 (section 6.2.6), I found an emphasis on multidisciplinary and non-drug treatments, such as formulation and bio-psycho-social approaches. I came across to methods such as formulation as an underlying reason for variation: because some clinicians used it and some did not; so this situation could lead to variation. However, overall such methods had a good reputation; I have also come across to the point that clinicians had different opinions over them. Future of such methods such as formulation, their role in mental health and the view point of practitioners over that issue is important and it is necessary to explore further the perception of clinicians in such areas. In the following paragraph, I have suggested some studies to explore perceptions of clinicians, especially the acceptability and reputation of different approaches.

One of the main perceptions that I identified in this study was a considerable concern of some participants regarding drug therapy. On the one hand, it is necessary to explore the concerns over drugs' side effects and their possibility of abuse and trade¹; and on the other hand, it would be helpful to resolve 'unwarranted' concerns.

7.4.4 Psychiatry-related cognitive activities

The aim of this study was exploring variation in psychiatric-decision making and I came across a model for related cognitive processes. However, as Daniel (1986) suggested medical diagnosis exemplifies a general cognitive

¹ In my visit to ADHD clinic in The Cambridge University, I was informed of an ongoing study on effects of stimulant drugs on adult patients.

activity in comprehension of meanings; therefore, emerging frameworks could have more general implications. Similarly, Churchill (1990) suggested all knowledge are subjective and criticised Leder for limiting his hermeneutical model to medicine. I come across a general model, which could be helpful in understanding and justifying the observed variation in psychiatric practice. However, that general model could be related to broad philosophical, psychological and linguistic discussions on knowledge and cognition (Atherton, 2008). Therefore, I leave evaluation of the model, which I introduce in the following part, for future researches.

Humans do not just 'see' things and all observations involve comparison of the obtained knowledge via observations with the related 'reference-knowledge'. Therefore, since people could have different sets of reference-knowledge, they might perceive similar things differently. Arnason (2000, p 18) has explained this point:

"It is a general characteristic of human understanding that it is radically bound to the presuppositions that we bring with us into the particular situation of the matter we are trying to understand".

The reference-knowledge, fore-structures or presuppositions could develop based on experiences. However, in order to make further analysis, it is necessary to explore role of language in the processes of learning and application of knowledge. As I explained in section 5.4.1, participants dealt

with knowledge in two forms of 'words' and 'schema'. The concept of 'schema', similar to the Leder's concept of 'person-as-ill' (1990, p 11), consist of perceptions, perceptual images and any other transporters of meaning other than the words.

Therefore, reference-knowledge could be in form of 'reference-words' or 'reference-schema' and the comparison during the cognition process, could be comparison of words with words, or schemas with schemas. Consequently, there are two methods of cognition: word-based and schema-based.

Existence of these two forms of knowledge, leads to two processes of 'gaining' and 'translation'. Whenever, a person confronts to a form of knowledge and obtains it in the same way, the knowledge is 'gained'. However, a person might 'translate' knowledge from one form to the other.

In previous chapters, I encountered the concept of 'translation' of concepts into words and vice versa. Psychiatric definition of guidelines, education and diagnosis involves translation between words and schemas, which indicates difficulty of those processes and possibility of variation in them. I have illustrated following conceptualization in the following table.

Table 7.1 Illustration of word-based and schema-based cognitive activities in psychiatric definition, education and diagnosis.

		Word-based	Schema-based
Guideline definition		Translating schema of a phenomenon into words	-
Education	Theory learning	gaining reference words	Translating words of guidelines into reference schemas
	Practical learning	Learning to translate schema into words	Gaining reference schema
Diagnosis process	Gathering information	Translating schema of client into words	Gaining a schema of client
	Interpreting information	Comparing translated words of client with reference-words	Comparing gained schema of client with reference-schema

Above stages are compatible with conceptual, institutional, and interactional levels of medicalization (Conrad, 1992). This hypothesis has an important implication for medical education and policymaking and it is necessary to further explore it critically. Similarity and differences of this model with various philosophical, psychological and linguistic theories should be thoroughly investigated.

After essential construction of the model, the result has to be applied to real psychiatric settings. In further evaluations, it might be observed that clinicians use different degrees of both methods (word-base and schema-

base). Then it would be necessary to explore consequences of using each and contributing factors to select one of them. For example, how experience affect clinicians' application of these methods. It might be possible that initially clinicians need to rely on the word-base method, but as they earn experience, they gradually tend to depend on schemas. This hypothesis is related to relationship of work setting and favouring some disorders (see sections 6.2.3 and 6.2.4), because clinicians might develop schemas based on their work-setting and use this schema to make diagnosis more often; and also it might be related to age of clinicians and their determination in making diagnosis, because by increase of age and experience, clinicians could develop and establish reference-schemas and 'see' any client as one of their schemas (hence they might suggest ADHD or other disorders, and do not wonder between different options) (see section 6.2.9). It is also necessary to investigate impact of relying on word-based or schema-based approach in the performance of clinicians. Schema-based method might be related to heuristics, which were explained in previous sections.

In addition, it is important to note the central role of 'translation' in causing variation. In a translation process, not only the 'translator' could select different items for translation, but also one translator might perform it different to others. For example, a clinician might focus on different aspects of a client and might interpret a particular issue differently. Alternatively, a student might concentrate on one particular piece of guidelines and translate it into a reference-schema in a particular way that inhibits them from

diagnosing ADHD for 'John'. For example, a participant excluded ADHD for John because he was a university student (section 6.2.2).

The possibility of translation in the process of guideline-definition suggests variation in defining new disorders. Researchers, academics and policy-makers could translate schema of people like 'John' into different disorders. The concept of ADHD had different names, definition and guidelines in the past (section 2.1.1). In this example, the concept was translated into different words at different times. However, theoretically it is possible that different academics simultaneously translate the 'same' concept into different words. The possibility of 'parallel translation' is compatible with competing of definitions in the process of medicalization.

All above points opened up various lines of study and enquiry for the future investigations.

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Appendix A: Utah Criteria¹

I. CHILDHOOD CHARACTERISTICS

A childhood history consistent with ADHD is established through the methods discussed above. The following are considered the necessary standards for ADD in childhood.

A. Narrow Criteria (DSM-IV)

That the individual meet full DSM-IV criteria for ADHD in childhood.

B. Broad Criteria

Both characteristics 1 and 2, and at least one characteristic from 3 through 6 below:

1. Hyperactivity: More active than other children, unable to sit still, fidgetiness, restlessness, always on the go, talking excessively

2. Attention deficits: Sometimes described as a “short attention span,” distractibility,

unable to finish schoolwork

¹ Adopted from WENDER, P.H., WOLF, L., AND WASSERSTEIN, J., 2001, Adults with ADHD, an Overview. ANNALS NEW YORK ACADEMY OF SCIENCES.

3. Behavior problems in school

4. Impulsivity

5. Overexcitability

6. Temper outbursts

C. Parents' Rating Scale (Conner's Abbreviated Rating Scale)

Although not essential for diagnosis, a score of 12 or higher places the patient in the 95th percentile of childhood "hyperactivity.")

II. ADULT CHARACTERISTICS

The Utah scheme requires that ADHD patients have both symptoms A and B below, plus two of the remaining symptoms (e.g., must be ADHD-Combined type). At the time of the development of these criteria, Inattentive and the Hyperactive-Impulsive subtypes were not well validated (see above and below). Even now, more work needs to be completed to validate the existence of exclusively Inattentive or Hyperactive- Impulsive subtypes in adults. The reader should also be aware that the Utah criteria are not based exclusively on the behavioral criteria outlined in the DSM, but also include associated features and subjective symptoms (e.g., low frustration tolerance, temper outbursts, etc.) which the adult undergoing evaluation and his/her partner report.

A. Motor hyperactivity

Manifested by restlessness, inability to relax; “nervousness” (meaning inability to settle down, not anticipatory anxiety); inability to persist in sedentary activities (e.g., watching movies or TV, reading the newspaper); always on the go, dysphoric when inactive.

B. Attention deficits

Manifested by an inability to keep one’s mind on conversations; by distractibility (incapacity to filter extraneous stimuli); difficulty keeping one’s mind on reading materials or tasks (“mind frequently somewhere else”); frequent “forgetfulness”; by often losing or misplacing things; forgetting appointments, plans, car keys, purse, etc.

C. Affective lability

Usually described as antedating adolescence and in some instances as far back as the patient can remember. Manifested by definite shifts from a normal mood to depression or mild euphoria or—more often—excitement; depression described as being “down,” “bored,” or “discontented”; anhedonia not present; mood shifts usually last hours to at most a few days and are present without significant physiological concomitants; mood shifts may occur spontaneously or be reactive.

D. Hot temper, explosive short-lived outbursts

A hot temper, “short fuse,” “low boiling point”; outburst usually followed by quickly calming down. Subjects report they may have transient loss of control and be frightened by their own behavior; easily provoked or constant irritability; temper problems interfere with personal relationships.

E. Emotional over reactivity

Subjects cannot take ordinary stresses in stride and react excessively or inappropriately with depression, confusion, uncertainty, anxiety, or anger; emotional responses interfere with appropriate problem solving—they experience repeated crises in dealing with routine life stresses; describe themselves as easily “hassled” or “stressed out.”

F. Disorganization, inability to complete tasks

A lack of organization in performing on the job, running a household, or performing school work; tasks are frequently not completed; the subject goes from one task to another in haphazard fashion; disorganization in activities, problem solving, organizing time; lack of “stick-to-it-iveness.”

G. Impulsivity

Minor manifestations include talking before thinking things through; interrupting others' conversations; impatience (e.g., while driving); impulse buying. Major manifestations may be similar to those seen in mania and Antisocial Personality Disorder and include poor occupational performance; abrupt initiation or termination of relationships (e.g., multiple marriages, separations, divorces); excessive involvement in pleasurable activities without recognizing risks of painful consequences (e.g., buying sprees, foolish business investments, reckless driving); inability to delay acting without experiencing discomfort. Subjects make decisions quickly and easily without reflection, often on the basis of insufficient information, to his/her own disadvantage.

H. Associated features

Marital instability; academic and vocational success less than expected on the basis of intelligence and education; alcohol or drug abuse; atypical responses to psychoactive medications; family histories of ADHD in childhood; Antisocial Personality Disorder and Briquet's syndrome. The diagnosis of ADHD in an adult is only made when other psychological and psychiatric disorders, such as rapid cycling bipolar illness, schizophrenia, etc. have been eliminated. This stringency in terms of other psychiatric diagnoses is somewhat unique among diagnostic schemas. Often considered the most stringent of diagnostic schema, the Utah Criteria make childhood hyperactivity continuing into adulthood a mandatory diagnostic symptom. This criterion obviously eliminates that subgroup of ADHD children and ADHD adults who were, and are, characterized by inattentiveness without hyperactivity and impulsivity. As

these criteria were developed prior to the more recent onset of ADHD subtyping, the current Predominately Inattentive subtype might not fit as well into this framework. These more stringent requirements were employed in the senior author's research in order to limit investigations to the most clear-cut subgroup of adult patients with ADHD. What was useful, however, for research purposes need not be helpful clinically, because it is clearly the case that many children and adults with inattention alone respond to the same treatments. This also implies a common or related underlying pathophysiology. The Utah diagnostic criteria are similarly stringent in excluding patients with comorbid psychiatric diagnoses such as major mood disorders, Schizophrenia, Antisocial Personality Disorder, and Schizotypal or Borderline Personality Disorders. Again, it was not the intention to thereby deny the frequent comorbidity between ADHD and those conditions (see Marks *et al* , this volume). This rather represented the desire to investigate a more homogeneous sample. Individuals diagnosed with these excluded categories often also have prominent ADHD symptoms, and an important area for further investigation is the influence of drug treatment on the ADHD symptoms of adults with comorbid disorders.

Appendix B: Research tools and letters

Introductory letter and information sheet

ID number:

REC Ref: 07/Q2502/6

Version: 5

Date: 27/06/07

Short title of the study: Exploring variations in perception
of health care professionals

School of Sociology & Social Policy
Law & Social Sciences Building
University of Nottingham
University Park
Nottingham
NG7 2RD
Tel: +44 (0)115 951 5379
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Email: lgxps@nottingham.ac.uk

Date

Address of recipient

Letter of invitation/information

Dear Colleague,

Re: Exploring variations in perception of health care professionals, a
PhD by research

My name is Pooria Sarrami Foroushani MD. I am studying at Nottingham University and my supervisors are Professor Ian Shaw¹, Professor Justine Schneider² and Professor Chris Hollis³. I would like to invite you to take part in the study described below.

¹ Professor of Health Policy (University of Nottingham), Professor of the Institute of Mental Health
² Professor of Mental Health and Social Care (University of Nottingham and Nottinghamshire Healthcare Trust)
³ Professor of Child & Adolescent Psychiatry, Head of Division of Psychiatry. Honorary Consultant in Developmental Neuropsychiatry (Nottinghamshire Healthcare Trust)

What is the purpose of the study?

In this study, I am interested in the perceptions that different health care professionals have of people with specific behavioural problems. My main goal is to know what different approaches are available and what factors influence professionals' perception and choice of treatment approach.

Why have you been chosen?

I am writing to a random sample of general practitioners, psychologists and psychiatrists who work in Nottinghamshire.

Do I have to take part?

You are free to choose whether to join this study or not. If you wish to participate, please keep this information sheet and sign the consent form, returning it in the envelope provided. You will have the right to withdraw at anytime during the research.

What will happen to me if I take part? What do I have to do?

All you are asked to do is:

- Spend 5-10 minutes reading the enclosed vignette and then answer the five questions, returning this in the pre-paid envelope provided.
- I will invite fifteen participants chosen to reflect the range of responses received, to take part in a face-to-face interview. This is likely to take 30-60 minutes, and will be arranged at a time and place to suit each participant. I will use tape recorder and/or digital voice recorder to record interviews.

- If you complete the questionnaire, you are still free to refuse the follow-up interview.

What are the possible benefits of taking part?

By helping with this research, you will assist the development of one student's PhD in medical sociology. This could contribute to better care of people who seek help from mental health services.

If you are interested in receiving feedback, I will inform you of the results of this research and any publication related to it. Please indicate your interest in appropriate place in the answer sheet.

What if there is a problem?

Any complaint about the way you have been dealt with during the study will be addressed. In such circumstances, please contact:

Dr Nick Stevenson
University of Nottingham
University Park
Nottingham, NG7 2RD
Tel: 0115 8467189

What will happen when the research study stops?

No personal data of yours will be kept after the study.

Will my taking part in the study be kept confidential?

Your answers will be used for my PhD research only, I will keep your personal data and answers confidential, and I will not mention them in any identifiable manner. I will store the recorded tapes in a locked

cupboard in my university room and I will save digital files in my password-protected PC in the university. Those materials would be safely stored in university for 7 years and will be destroyed after that.

What will happen to the results of the research study?

The results of the research study will be used in my PhD. The results (but no identifying details) may also be published in relevant medical and social science journals and will be made available to health and social services.

Thank you for taking time to read this letter. Please feel free to contact me at anytime if you have any questions about the research project, my contact details are outlined at the end of this letter. If you do feel you would like to take part in the study, please sign the consent form, and simply read the enclosed vignette, answer the questions, and send both the consent form and the answer sheet back to me in the enclosed self-addressed envelope.

Yours sincerely,

Pooria Sarrami Foroushani, MD

The Consent form

ID number:

REC Ref: 07/Q2502/6

Version: 3

Date: 27/06/07

Short title of the study: Exploring variations in perception of health care professionals

Name of Researcher: Dr Pooria Sarrami Foroushani

1. I confirm that I have read and understand the information sheet dated 27/06/07 (Version 5) for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. ☐
2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, without my Legal rights being affected. ☐
3. I understand that relevant sections of any of my data collected during the study may be looked at by responsible individual from The University of Nottingham, School of Sociology and Social Policy and I give permission for these individuals to have access to my records. ☐
4. I agree to take part in the above study. ☐
5. I am willing to be approached to take part in follow up interviews in connection with this study, if necessary. ☐
6. I understand that the interviews would be tape-recorded. ☐

Name of the participant: _____ **Date:** _____

Signature: _____

Email: _____

Telephone number: _____

Postal address: _____

Name of the researcher: Dr Pooria Sarrami Foroushani **Date:** _____

Signature: _____

One copy is for participant and one is for the researcher.

The vignette

REC Ref: 07/Q2502/6

Version: 2

Date: 27/06/07

Short title of the study: Exploring variations in perception of health care professionals

Please read the following text and answer five related questions.

John is a 22-year-old university student. Despite his high intelligence, he has some academic and financial problems. He requested help for his difficulties from his university counselling service. He described himself as someone who always over-commits himself and finds it difficult to relax even when he is not studying. He said that he always has difficulty concentrating while reading or listening. He also believes that he has a persistent difficulty in self-control, which creates problems for him in the form of reckless driving, gambling and sexual behaviour and impulsive buying or short-lived romances. This behaviour is sometimes dangerous and compromises his values, but John continues, despite feeling shame and guilt. He usually makes important decisions before knowing all the facts and having the chance to think them through. He is often “down”, “bored” or “discontented”, although he can become excited and over-stimulated very easily. Some other problems of his are disorganization in solving problems and structuring his time (e.g. at home and university he frequently moves from one task to another before completing the first one). He also tends to have a short-term anger problem, but he always calms down quickly. In addition, he becomes readily distressed and frequently finds himself psychologically incapacitated by minor difficulties (e.g., he becomes confused and hopeless if his workload increases). He drinks eight cups of coffee each day. Until one year ago, he also used to use cannabis occasionally, but this has now stopped. He does not use any special medication; but at primary school, he was diagnosed as having ADHD (Attention Deficit Hyperactivity Disorder) and was treated by methylphenidate (Ritalin®) for 3 years. This treatment was discontinued because his hyperactivity reduced, although he remains fidgety today. John’s father is an alcohol dependent who has changed his job several times (John has extreme dislike of alcohol after viewing his father’s problems), and he describes his mother as an anxious person. His parents were divorced eight years ago.

Questions (please use the page overleaf, if needed):

1. Based on your opinion, what is John's main problem?

2. Based on your opinion, what is the most important cause of John's above-mentioned problem (or that of anyone with a similar condition)?

3. How do you respond to John's problem (what would you suggest in this case)?

4. Have you ever encountered a person with similar difficulties? If yes, how many people with such difficulties have you come across in the last twelve months?

5. Do you think John and people with similar difficulties would benefit from the interventions of any professional group? If yes, which professional group would be the most appropriate?

Please state here if there is any other point that you wish to mention:

Please provide following information:

Age: _____

Sex: ☐M ☐F

Educational Degree: ☐BSc ☐MSc ☐PhD ☐MD other: _____

Occupation: ☐GP ☐Psychologist ☐Psychiatrist other: _____

☐ I would like to receive feedback of the results of this research.

☐ I am interested to be informed about any publication of this research.

☐ I am interested to give comments on publications prior to publication.

Interview Guideline

REC Ref: 07/Q2502/6

Version: 2

Date: 04/05/07

Short title of the study: Exploring variations in perception of health care professionals

The answer sheet of participants to the first part of the research would be presented to them during the interview in order to remind their answers.

Framing the conversation:

I am interested to comprehend process of diagnosis and treatment of disorders. The vignette that you have read in the previous part has been presented to different clinical professionals and I have various answers. I am not going to make a judgment and I do not consider any suggested diagnosis as 'correct' or 'wrong'; I am only interested to understand rationale for suggesting each diagnosis and I want to find explanations for existence of differences and similarities in the diagnoses.

Questions:

- 1) To what degree do you have similar clients to 'John'? How do you react to them? How those clients are usually referred to you?
- 2) Based on your judgment, to what degree might your response to the vignette be different from real clients? How and why could it be different?
- 3) You have mentioned in the first part of the research that the main problem of John is (...); I am interested to know why have you suggested it?
- 4) Why have you suggested (treatment plans / preventive measures)?
- 5) Some of the informants have suggested (...) as main problem of John. What is your idea about it?
- 6) Why do you think there are (different / similar) attitudes among clinical professionals?

Appendix c: The milestones of getting approvals

The milestones of getting approvals	Ethical approval	R&D approval from the Nottingham Primary Care Trust	R&D approval form the Nottinghamshire Health Care NHS Trust
June-July 2006	I faced the question of necessity the approval of the NHS, then studied related documents and learnt that it was necessary to obtain the approvals.		
September-December	I started registration in the online form of NHS and preparing related documents, such as peer reviews and insurance letter from The University of Nottingham.		
January 2007	I attended a meeting of the research ethics committee and was informed of some information that the committee demanded before granting the approval.		
February			Although receiving the R&D approval was conditioned to the ethical approval, in order to save time, I sent my documents to the health care trust.

March	I prepared the extra information and replied the ethical committee.		
April	I received ethical approval.	I was informed that I need an approval from primary care trust and started to prepare necessary documents.	
May		I sent the documents to the primary care trust.	
June	I informed the ethical committee of some changes in my research strategy, and they considered them as major amendments. I formally asked for a new approval and received approval for major amendments.	I received R&D approval from PCT.	I followed my case, and informally health care trust informed me that I could start my research; however, formal approval was delayed due to staff shortage of the trust.
August			I received formal approval from Nottinghamshire Health Care NHS Trust.

Appendix D: Details of received replies

Feedback to the vignette

Crosstabulation of professionals groups with different types of received replies after the first time of sending the vignette to 150 clinicians in the Nottinghamshire.

		Apologies	Replies without interest to interview	Replies with interest to interview	Undelivered	Total
Professional groups	GPs	3	0	3	0	6
	Psychologists	0	1	5	2	8
	Psychiatrists	1	0	9	1	11
	Total	4	1	17	3	25

Feedback to the reminder to reply to the vignette

Crosstabulation of professionals groups with different types of received replies after the second time of sending the vignette to 125 clinicians in the Nottinghamshire.

		Apologies	Replies without interest to interview	Replies with interest to interview	Undelivered	Total
Professional groups	GPs	1	0	1	3	5
	Psychologists	0	0	1	2	3
	Psychiatrists	0	2	6	1	9
	Total	1	2	8	6	17

Feedback to selected invitations to reply to the vignette

Crosstabulation of professionals groups with different types of received replies after sending selected invitations the vignette to 27 GPs and 1 Psychiatrist in the Nottinghamshire.

		Apologies	Replies without interest to interview	Replies with interest to interview	Undelivered	Total
Professional groups	GPs	0	0	15	0	15
	Psychologists	-	-	-	-	-
	Psychiatrists	0	0	1	0	1
	Total	0	0	16	0	16

Total received replies to the vignette

Crosstabulation of total received replies from professionals groups with sex.

		Males	Females	Total
Professional groups	GPs	11	8	19
	Psychologists	2	5	7
	Psychiatrists	13	5	18
	Total	26	18	44

Table of general classification of the participants

The table include 44 replies to the vignette, ordered by the general classification of participants.

Participants ID	General classification of participants' perception of ADHD	Classification of replies on causation	Classification of replies on appropriate professional group	Classification of replies on treatment	Classification of replies on diagnosis				explanation
					ADHD	Overlapping psychiatric labels	ADHD related features	ADHD symptoms	
024	Suggested	genetic-biological	multidisciplinary	combination	mentioned	did not mention	did not mention	did not mention	
105	Suggested	Unassigned	nonmedical	combination	mentioned	did not mention	did not mention	mentioned	Despite suggesting nonmedical professional group, s/he strongly emphasized on ADHD in adults.
150	Suggested	Unassigned	multidisciplinary	combination	mentioned	did not mention	did not mention	did not mention	
157	Suggested	genetic-biological	multidisciplinary	combination	mentioned	did not mention	did not mention	mentioned	
114	Suggested	combination	multidisciplinary	Anti-medication	mentioned	did not mention	did not mention	did not mention	Despite the fact s/he believed in non-usefulness of amphetamines in treatment of ADHD in adults, s/he viewed the situation strongly as ADHD in adults.
121	Suggested	combination	multidisciplinary	combination	mentioned	did not mention	did not mention	mentioned	
151	Suggested	Unassigned	medical	Unassigned	mentioned	mentioned	mentioned	did not mention	Although suggested other labels as well, but while explaining professional group, again emphasized on adult ADHD.
155	Suggested	combination	multidisciplinary	Unassigned	mentioned	did not mention	did not mention	did not mention	
076	considered	combination	multidisciplinary	non-medical	mentioned	did not mention	did not mention	mentioned	
095	considered	combination	multidisciplinary	non-medical	did not mention	did not mention	did not mention	did not mention	This participant did not mention ADHD, but referred to Ritalin, so I initially classified him/her as 'considered', but later in the interview it reveals that s/he misread the vignette, and I re-classified him/her as 'did not mention.'
129	considered	social-environmental	nonmedical	non-medical	mentioned	mentioned	did not mention	did not mention	
152	considered	combination	nonmedical	non-medical	mentioned	mentioned	did not mention	mentioned	
154	considered	social-environmental	nonmedical	non-medical	mentioned	mentioned	did not mention	did not mention	
159	considered	Unassigned	multidisciplinary	non-medical	mentioned	mentioned	mentioned	mentioned	
164	considered	uncertain	nonmedical	non-medical	mentioned	did not mention	did not mention	did not mention	
060	considered	combination	multidisciplinary	combination	mentioned	did not mention	mentioned	mentioned	

139	considered	uncertain	nonmedical	combination	did not mention	mentioned	mentioned	mentioned	Although did not mention ADHD directly, suggested prescription of Ritalin.
147	considered	genetic-biological	multidisciplinary	combination	did not mention	did not mention	mentioned	mentioned	Although did not mention ADHD directly, suggested prescription of Ritalin.
044	considered	uncertain	nonmedical	Anti-medication	mentioned	mentioned	did not mention	did not mention	
112	considered	social-environmental	nonmedical	Anti-medication	mentioned	did not mention	did not mention	mentioned	
127	considered	Unassigned	nonmedical	Unassigned	mentioned	mentioned	mentioned	mentioned	
130	considered	Unassigned	Unassigned	Unassigned	mentioned	mentioned	did not mention	mentioned	
113	considered	combination	Unassigned	Unassigned	mentioned	mentioned	mentioned	did not mention	
012	did not mention	combination	nonmedical	non-medical	did not mention	mentioned	did not mention	mentioned	
018	did not mention	genetic-biological	nonmedical	non-medical	did not mention	mentioned	did not mention	did not mention	
056	did not mention	combination	multidisciplinary	non-medical	did not mention	mentioned	mentioned	mentioned	
058	did not mention	social-environmental	nonmedical	non-medical	did not mention	mentioned	mentioned	mentioned	
088	did not mention	social-environmental	multidisciplinary	non-medical	did not mention	did not mention	did not mention	mentioned	
115	did not mention	combination	multidisciplinary	non-medical	did not mention	mentioned	did not mention	did not mention	
117	did not mention	social-environmental	nonmedical	non-medical	did not mention	mentioned	did not mention	did not mention	This participants provide a different account during the interview and I re-classified him as 'considered'.
138	did not mention	genetic-biological	nonmedical	non-medical	did not mention	did not mention	did not mention	mentioned	
156	did not mention	Unassigned	nonmedical	non-medical	did not mention	did not mention	did not mention	did not mention	
158	did not mention	social-environmental	Unassigned	non-medical	did not mention	mentioned	did not mention	did not mention	
160	did not mention	social-environmental	nonmedical	non-medical	did not mention	did not mention	did not mention	did not mention	
161	did not mention	combination	Unassigned	non-medical	did not mention	mentioned	did not mention	did not mention	
162	did not mention	social-environmental	nonmedical	non-medical	did not mention	did not mention	did not mention	mentioned	
167	did not mention	Unassigned	Unassigned	non-medical	did not mention	mentioned	did not mention	did not mention	
168	did not mention	social-environmental	Unassigned	non-medical	did not mention	did not mention	did not mention	did not mention	
135	did not mention	Unassigned	multidisciplinary	combination	did not mention	mentioned	did not mention	did not mention	
153	did not mention	social-environmental	nonmedical	Anti-medication	did not mention	mentioned	did not mention	mentioned	
163	did not mention	uncertain	nonmedical	Anti-medication	did not mention	did not mention	did not mention	mentioned	
140	did not mention	uncertain	Unassigned	Unassigned	did not mention	did not mention	did not mention	did not mention	
124	did not mention	uncertain	Unassigned	Unassigned	did not mention	mentioned	did not mention	did not mention	
084	did not mention	combination	multidisciplinary	Unassigned	did not mention	did not mention	did not mention	did not mention	

Matrix one- Appropriate professional group and Causation

Appropriate professional group Causation	multidisciplinary	medical	Non-medical	Unassigned
Social-environmental factors	1	0	8	2
Genetic-biological factors	3	0	2	0
Combination	9	0	2	2
Uncertain	0	0	4	2
Unassigned	3	1	3	2

Matrix two- Treatment and causation

<div>Treatment</div> <div>Causation</div>	medical	non-medical	combination	Anti-medication	Unassigned
Social-environmental factors	0	9	0	2	0
Genetic-biological factors	0	2	3	0	0
Combination	0	7	2	1	3
Uncertain	0	1	1	2	2
Unassigned	0	3	3	0	3

Matrix three - Treatment and appropriate professional group

<div>Treatment</div> <div>Appropriate professional group</div>	medical	non-medical	combination	Anti-medication	Unassigned
multidisciplinary	0	6	7	1	2
medical	0	0	0	0	1
Non-medical	0	12	2	4	1
Unassigned	0	4	0	0	4

Appendix E: Details of performed interviews

Total performed interviews

Crosstabulation of total performed interviews with professionals groups with sex.

		Males	Females	Total
Professional groups	GPs	2	1	3
	Psychologists	2*	2	4
	Psychiatrists	8**	1	9
	Total	12	4	16

* One interview performed over the phone. ** Four interviews performed over the phone.

Distribution of important factors

Distribution of important factors in position of the participants towards ADHD, (Y: Yes, N: No).

		Suggested ADHD			Considered ADHD								Did not mention ADHD				
Participants ID		105	150	157	060	112	113	117	127	139	147	152	018	056	058	095	138
Experience	Has the participant ever come across an adult ADHD patient who was successfully treated?			Y	N				N	Y			N			N	
	Has the participant ever treated an adult ADHD patient him/herself?	Y				N											
	Has the participant come across probable adult ADHD patents that were not formally evaluated?				Y		Y	Y	N				N			N	

	Has the participant ever observe an adult ADHD patient who was unsuccessfully treated for ADHD?					Y								Y	Y		
Awareness	Was the participant aware of diagnostic criteria of adult ADHD?	Y	Y		N	N	N		N	Y	N	N	N	N		N	
	Was the participant aware of a person or centre to refer a potential adult ADHD patient to it?	Y	Y	Y						Y		N			N		
Favouring overlapping disorders	Did the participant strongly view the vignette as another psychiatric condition?										Y		Y	Y		Y	Y
Misconceptions	Did the participant suggest ICD for diagnosis of ADHD in adults?					Y					Y						
	Did the participant consider a university student unlikely to have ADHD?					Y	Y										Y

	Did the participant believe ADHD in adult is a rare diagnosis?						Y				Y						Y
Drug related concerns	Was the participant unwilling to prescribe amphetamines because of their capacity to be abused or trade?					Y	Y										Y
	Was the participant unwilling to prescribe amphetamines because of their biological dangers?										Y	Y					
	Was the participant unwilling to prescribe amphetamines because of practical problems?											Y					
Application of Formulation	Did the participant prefer formulation over providing diagnosis?							Y		Y						Y	Y

Work-setting	Was suggested diagnosis for the vignette similar to the usual patients in work setting of the participant?	Y			Y	Y	Y				Y			Y	Y	Y	Y
Debates on validity of ADHD	Has the participant uncertainty towards validity of childhood ADHD?												Y		Y		Y

Summary of interview findings

Summary of interview findings, focused on factors that could contribute in position of each participant towards ADHD

Participants ID number and position	Summary of findings
105 (suggested ADHD)	This participant trained in a country with American system and attended workshops in USA on ADHD. S/he was aware of adult ADHD and the centre for it in London. S/he currently has an adult ADHD patient being treated with amphetamines. S/he perceived the vignette as a typical case of ADHD and suggested ADHD for it.
150 (suggested ADHD)	The participant works in the third layer of health care referral system receiving variety of psychiatric clients. S/he was aware of different diagnostic methods for diagnosing ADHD, and how to differentiate ADHD with overlapping conditions. S/he described the vignette as a good description of an adult with ADHD and suggested ADHD for it.
157 (suggested ADHD)	The participant suggested ADHD for the vignette. S/he explained his/her belief in adult ADHD by having an adult ADHD patient. The patient and her family were well known by the participant. The patient had difficulties since she was a baby, and her problems worsen as she grew up. However, she could manage to enter university despite her growing difficulties. Then she herself found out about ADHD and convinced the participant to refer her to London to receive ADHD diagnosis and treatment, which turned to be very helpful.
060 (considered ADHD)	S/he previously used to work with adult patients with physical health problems such as head injury and at the time of interview used to work with children with physical problems plus disabilities such as ADHD. S/he suggested for the vignette ADHD and dys-executive problems caused by brain injury. S/he declared to be less aware of how ADHD symptoms show themselves in adults. S/he had not seen a formally diagnosed adult ADHD patient, but was suspicious to this diagnosis in parents of some of his/her child clients with diagnosis of ADHD.
112 (considered ADHD)	S/he worked in a forensic setting, where s/he suggested most patients have a diagnosis of personality disorder or schizophrenia. S/he recognised the vignette to be about ADHD, but considered most of it equally consistent with personality disorders, which s/he suggested to be more prevalent. S/he believed that presence of John in university made the diagnosis of ADHD unlikely. S/he once saw an adult person who was diagnosed with ADHD, who was treated unsuccessfully with Ritalin. S/he recommended ICD criteria for the diagnosis of ADHD in adults, and also believed that patients in a forensic setting might abuse or trade amphetamines. At the end of the interview, s/he enquired about diagnostic criteria for adults with ADHD.
113 (considered ADHD)	This participant introduced the place that he worked in as a clinic, where clients have drug addiction, often with multiple psychiatric labels. S/he suggested the vignette includes symptoms that are overlapping between different disorders and offered a list of diagnosis for John

	including ADHD. S/he used to have a colleague who was child and adolescence psychiatrist, who suggested ADHD for some clients; but the clients, did not come to their appointments and their diagnosis was not confirmed. The participant suggested ADHD in adults to be a rare, and controversial disorder that is difficult to diagnose. S/he was concerned to prescribe amphetamines, as it could become abused or sold. S/he also believed that presence of John in University is against the diagnosis of ADHD.
117 (considered ADHD)	The participant worked with in adolescent patients with whole range of psychiatric problems. S/he was generally aware of main symptoms of ADHD, but preferred to work based on formulation and believed that it is not a good idea to suggest diagnosis for a vignette.
127 (considered ADHD)	This participant introduced the place that s/he worked in as a centre for adults with learning disabilities, where patients have mainly diagnosis of autistic spectrum and low IQ. S/he considered adult residual ADHD for the vignette, however s/he was not sure how to diagnose ADHD in adults. S/he had observed children getting benefit from treatment of ADHD with amphetamines; however, s/he has not seen any adult ADHD patients yet.
139 (considered ADHD)	This participant introduced the place that s/he worked in as a crisis centre, and usually used to work based on formulation. Some years ago, s/he observed an adult patient who was successfully treated for ADHD. The participant was aware that ADHD in adult is not mention in ICD-10. S/he suggested ADHD for the vignette as a possible diagnosis along with other diagnoses. S/he mentioned if s/he became suspected to ADHD, s/he would consult with someone with special interest in adult ADHD.
147 (considered ADHD)	This participant introduced the place that s/he worked in as a forensic setting, where clients have mainly personality disorders. S/he considered ADHD for the vignette, however, s/he suggested psychostimulants could make situation worse, and based on his/her experience s/he uses sedative drugs for such patients. S/he also referred to existence of overlap between symptoms of ADHD and personality disorders. S/he was not sure about diagnostic criteria of ADHD in adults, but referred to DSM and ICD, and mentioned some symptoms of ADHD. S/he believed most of children with ADHD grown out of it, and although s/he had observed symptoms of ADHD in considerable amount of forensic patients, s/he considered only a very small group of them to have ADHD.
152 (considered ADHD)	The participant was a GP with psychiatric training. S/he mentioned practical difficulties in diagnosis and treatment of ADHD and suggested that they could affect the decision over John's diagnosis. S/he believed whether a clinicians offer ADHD for John, would depend on availability of relevant resources and options. S/he supposed that there is uncertainty and lack of consensus for diagnosis and treatment of ADHD. S/he regarded Ritalin as a potentially lethal drug and recommended that nobody prescribe Ritalin for adults in UK. S/he suggested the vignette highlight overlaps between diagnosis of ADHD and personality disorders.
018 (did not mention ADHD)	This participant indicated clear uncertainty towards ADHD in children as a real diagnosis; s/he mentioned s/he has never seen an adult patient of ADHD, s/he displayed interest in bipolar disorder; s/he was attending trainings for bipolar disorder, and suggested it for the vignette.

056 (did not mention ADHD)	S/he introduced the place that s/he worked in as a forensic setting, in which clients usually have personality disorder; s/he attributed characteristics of the vignette to personality disorder and suggested it for the vignette. S/he has seen some patients with diagnosis of ADHD, though s/he did not suggest the diagnosis him/herself and described those patients to have many different labels attached to them, with limited usefulness. S/he was not sure how to differentiate between ADHD and personality disorders.
058 (did not mention ADHD)	S/he usually visits affective disorders and suggest depression and anxiety for the vignette. S/he had seen only one adult ADHD patient seven years ago, who was unsuccessfully treated with amphetamines. S/he generally worked based on formulation and criticised the number of children who are diagnosed for ADHD in USA.
095 (did not mention ADHD)	S/he introduced his/her usual clients to have personality disorder or schizophrenia. S/he suggested personality disorder for John and in his/her explanations attributed many symptoms of ADHD to schizophrenia. S/he suggested approaching to symptoms of John via formulation and with multidisciplinary approach. S/he suggested ADHD is seen as a childhood condition, and s/he mentioned s/he has never come across an adult who has been diagnosed and treated for adult ADHD. S/he believed that majority of patients who manifest attention problems have schizophrenia.
138 (did not mention ADHD)	The participant has legal qualifications, in addition to psychiatric degree, and introduced his clients as forensic patients in prisons that have usually personality disorders. S/he suggested personality and bipolar disorders for the vignette. S/he considered ADHD as a non-common disorder and explained higher prevalence of ADHD in USA, by the role of pharmaceutical companies and financial settings of health care system in USA. S/he had seen some adult patients who have diagnosis of ADHD since their childhood, and were successfully treated with amphetamines. S/he suggested that ADHD patients are less likely to be able to go to university. S/he was concerned of offering diagnosis of ADHD to his/her patients as the patients may demand ADHD as they perceive it a less negative label than the personality disorders and they might be also interested to trade the amphetamines.

Appendix F: Related Publications

Related to chapter 2:

SARRAMI-FOROUSHANI, P. (2007) Attention Deficit Hyperactivity Disorder in Adults: Control of Diversity in People, Neglect of Diversity in Professionals. *The Seventh International Conference on Diversity in Organisations, Communities and Nations*. Amsterdam, the Netherlands.

SARRAMI-FOROUSHANI, P. (2007) Attention Deficit Hyperactivity Disorder in Adults: Control of Diversity in People, Neglect of Diversity in Professionals. . *The International Journal of Diversity in Organizations, Communities and Nations*, 7, 247-53.

SARRAMI-FOROUSHANI, P. (2007) Considerations towards a Holistic Approach in Psychiatry: The Case Study of Attention Deficit Hyperactivity Disorder. *The International Conference on Interdisciplinary Social Sciences*. The University of the Granada, Spain.

SARRAMI-FOROUSHANI, P. (2007) An investigation of controversies around human rights of patients with ADHD. *Mental Health and Human Rights: Sociological Perspectives*. The University of Warwick, UK.

SARRAMI-FOROUSHANI, P. (2007) Internet: a place for different voices in health and medicine; a case study of attention deficit hyperactivity disorder in adults. *Communication Technologies of Empowerment*. Leeds, United Kingdom

SARRAMI-FOROUSHANI, P. (2008) Internet: a place for different voices in health and medicine; a case study of attention deficit hyperactivity disorder in adults. *Mental Health Review*, 13, 33-40.

Related to Chapter 3:

SARRAMI-FOROUSHANI, P (2007) Barriers to access health care professionals: a personal story. *Work in Progress*. Warwick, United Kingdom

Related to chapter 4:

SARRAMI-FOROUSHANI, P. (2009) Qualitative exploration of different diagnoses and treatments suggested for adults with ADHD, accepted abstract for 2nd international Congress on ADHD, Vienna, Austria

Related to chapter 7:

SARRAMI-FOROUSHANI, P. (2009) Exploring competing conceptual frameworks in medicalization of adults with ADHD; BSA Medical Sociology Group 41st Annual Conference, University of Manchester