HL IB Psychology

Factors Influencing Diagnosis: The Role of Clinical Biases in Diagnosis

Contents

What are Clinical Biases?

Clinical Bias in Diagnosis

- **Bias** is present when an attitude/viewpoint/opinion is directed towards what should be a **universally** agreed or accepted way of dealing with a subject or with a person or group of people
- Bias prevents **impartiality, neutralit**y and **objectivity** being applied e.g. to the depiction of **social or cultural groups** in the media; to the perception of some social or cultural groups in terms of their intelligence, ability or skills; to the **diagnosing** of some social or cultural groups depending on whom is responsible for the diagnosis
- Clinical bias in diagnosis occurs when the diagnosing clinician allows their own **prejudice, discrimination** or **political** views to influence the diagnostic procedure
- Clinical bias may occur at both the **conscious** and the **unconscious** level i.e. the clinician may be fully aware of their bias or they may be oblivious to it
- One negative consequence of clinical bias in mental health diagnosis is that a patient may not be heard properly, their **symptoms** may be dismissed or ignored which in turn may lead them to think that they are 'making a fuss' or that their symptoms are nothing to be concerned about
- Another negative consequence of clinical bias in diagnosis is that the wrong treatment or no treatment at all may be diagnosed which could have devastating consequences for the patient
- The **medical model** (as adhered to by many clinicians in Westernised, **individualistic** cultures) may be implicated in perpetuating clinical biases, particularly **gender bias** and **culture bias**

Clinical diagnosis should not be at the mercy of any sort of bias.

What is Gender Bias in Diagnosis?

- **Gender bias** is the tendency to either over-estimate (**alpha bias**) or under-estimate (**beta bias**) differences between males and females, usually resulting in one of the genders being viewed as inferior/abnormal and/or being treated negatively or unfairly
- One general example of gender bias can be seen in the **gender pay gap** (women are paid less than men for performing the same task)
- Gender bias in diagnosis may result in one gender being given preferential treatment in diagnosis while the other gender is treated according to the clinician's **assumptions** or prejudices (which are often the result of **stereotyping**)
- Women are more likely than men to be diagnosed with **depression** and physicians perceive divorced, separated or widowed women presenting with health issues as more likely to be depressed than men presenting with the same issues (Bertakis et al., 2001)
- Gender may be used to guide and inform mental illness diagnosis - often incorrectly - which can obscure the symptoms and lead to **disparity** in diagnosis (this links to the issue of **reliability** of diagnosis which is covered on a separate RN)
- Gender bias is more likely to affect females than males as medicine has traditionally been a field in which men have predominated and much of the medical '**norms**' for ideal mental (and physical) health have been based on male models (Vlassoff, 2007)

What is Culture Bias in Diagnosis?

- **Culture bias** is the tendency to assume that one culture provides a template for 'normality' so that other cultures are viewed as inferior/abnormal and the members of those cultures may be treated negatively or unfairly
- Culture bias can be seen in research studies which take an **ethnocentric** approach, assuming that behaviour is **universal**, ignoring **cultural relativism**

- Culture bias in diagnosis may result in one culture being given preferential treatment in diagnosis while the other culture is treated according to the clinician's **assumptions** or prejudices (which are often the result of **stereotyping**)
- More people from African-Caribbean backgrounds are diagnosed with **schizophrenia** in the UK and USA than are Caucasian people (McLeod, 2018)
- People from Puerto Rico have a tendency to respond to **stress** with severe physiological responses such as fainting fits and **heart palpitations** but these symptoms have frequently been **misdiagnosed** as **psychotic episodes** by clinicians from the USA (Guaraccia et al.,1990)
- Culture may be ignored and symptoms misunderstood if **culture-bound syndromes** are not considered as part of the diagnostic process (this links to the issue of **validity** of diagnosis which is covered on a separate RN)
- Culture bias is more likely to affect people from **collectivist** cultures as these cultures are more likely to be guided by **culture-bound** concepts of mental health and to use **traditiona**l forms of treatment rather than adhering to the medical model

Which studies investigate clinical biases in diagnosis?

- **Longnecker et al. (2010)** - gender bias in the diagnosis of schizophrenia
- **Jenkins-Hall & Sacco (1991)** - culture bias in the diagnosis of depression

Both Longnecker et al. (2010) and Jenkins-Hall & Sacco (1991) are available as Two Key Studies of Classification Systems – just navigate the Factors Influencing Diagnosis section of this topic to find them.

Two Key Studies of Clinical Biases

Key Study One: Longnecker et al. (2010)

Aim: To investigate the **gender ratios** (i.e. how many males, how many females took part per study) present in research studies on **schizophrenia.**

Participants: A total of 252,578 participants (147,725 male; 104, 853 female = 66% male; 34% female) amassed from 220 articles taken from a range of psychological journals.

Procedure: A **review article** in which a range of studies were analysed by the researchers to look for inconsistencies in terms of the number of males and females who featured as participants.

Results: The findings included the following observations:

- One **meta-analysis** that the researchers reviewed showed that the number of males used in schizophrenia is almost double that of the number of females used (1.94 males for every female participant)
- Males outnumbered females across all of the studies reviewed
- Males develop schizophrenia at an earlier age than females so this may be one reason for the gender imbalance in research
- Females who developed schizophrenia after the age of 45 were excluded from some early research which has resulted in this **diagnostic bias** towards males
- Females may be under-used as participants in studies of schizophrenia which means that the findings and conclusions of schizophrenia research may **over-represent** the male experience and **under-represent** the female experience

Conclusion: Females presenting with schizophrenic symptoms may be misdiagnosed due to clinicians operating a gender bias based on under-representation of females in research studies.

Evaluation of Longnecker et al. (2010)

Strengths

- A total sample size of 252,578 participants provides **robust quantitative data** that should withstand **statistical analysis** making the research **reliable**
- The findings of this research have good **application** and could be used to inform clinicians to treat males and females equally when they present with schizophrenia-type symptoms

Limitations

- The findings cannot determine why this gender imbalance in schizophrenia research happens, it can only suggest reasons which means that it lacks **explanatory power**
- The research studies in this review article were taken from seven different psychological journals which means that there could be inconsistencies to do with control, precision and procedure across the studies which would affect the reliability of the findings

Everyone should be treated with respect by their clinician – regardless of gender, ethnicity, age etc.

Key Study Two: Jenkins-Hall & Sacco (1991)

Aim: To investigate culture bias in the diagnosis of **depression**.

Participants: 62 White psychotherapists from the USA (39 female: 23 male with a mean age of 36 years) who were in possession of a Master's degree and who had been practising as a psychotherapist for at least three years.

Procedure:

- The participants watched a 3–minute video of a (fake) consultation between a client and a therapist
- The **independent variable** comprised four **conditions**:
  - A White female client acting 'depressed'
  - A Black female client acting 'depressed'
  - A White female client acting 'nondepressed'
  - A Black female client acting 'nondepressed'
- This was an **independent measures design** which meant that each therapist viewed only one of the above four conditions
- The fake consultations between client and therapist were developed using a script of questions taken from a **standardised depression inventory**
- The answers to the questions were written so as to highlight the presence or absence of the major **symptoms** of depression e.g. low mood; lack of interest in usual pastimes; difficulty sleeping
- The participants thought that they were viewing a real client/therapist interaction; they had no idea that the consultations were fake
- Once the participants had watched the video they filled in a **questionnaire** which used different **rating scales** measuring a range of **variables** linked to the 'client' viewed in the video including her **depressive symptoms**, **social skills** and **psychological state**

Results:

- The participants were able to correctly diagnose each woman in the 'depressed' condition, giving them high ratings on the depressive symptoms scale
- The Black non-depressed and the White non-depressed clients were rated similarly overall
- The participants gave lower ratings for social skills and **likeability** to the Black depressed clients, scoring them significantly more negatively on these dimensions than they did for the White depressed clients
- A combination of being both Black and depressed resulted in a more negative overall rating than for any other condition.

Conclusion:

- The therapists showed a racial bias against Black clients in that they evaluated depressed Black clients more negatively than they did depressed White clients
- Negative evaluations based on ethnicity, race or skin colour could bias the diagnostic process and may result in a depressed client receiving adverse, negative and ultimately harmful treatment

Evaluation of Jenkins-Hall and Sacco (1991)

Strengths:

- This findings of this study support previous research which showed that Black people may be discriminated against by White professionals if they are judged according to their culture/ethnicity rather than according to their symptoms
- The use of several different standardised rating scales is an example of **data triangulation** which increases both the **validity** and **reliability** of the study

Limitations

- Some of the participants may have realised that the consultations were fake, giving rise to **demand characteristics** which would lower the **ecological validity** of the study
- This is **socially sensitive** research which should be handled carefully as, once published, it could be used to perpetuate **stereotypes** about minority groups

Worked Example

The question is, '*Discuss the role of clinical bias in diagnosis'. [22]*

This essay question is asking you to offer a considered and balanced review of the role of clinical bias in diagnosis that includes a range of arguments, factors or hypotheses. Here is an exemplar paragraph for guidance:

Research in non-Western, collectivist cultures has found that there is more than one way of presenting with abnormal behaviour. Many non-Western cultures have identifiable mental disorders which cannot easily be categorised through the use of the ICD 11 or DSM-5 classification systems. These culture-specific mental disorders are referred to as culture-bound syndromes. The indigenous name is used in their description and they remain closely or even exclusively associated with the culture or population in which they were first identified e.g. hsieh-ping: (Taiwan) a brief trance state during which one is possessed by an ancestral ghost, who often attempts to communicate to other family members. Symptoms include tremors, disorientation and delirium, and visual or auditory hallucinations. Not understanding the cultural context of these symptoms would mean that the sufferer is at the mercy of a diagnosis which ignores their cultural significance and which could result in misdiagnosis leading to incorrect, even harmful, treatment.