



Case Report

The Danger of Diagnostic Overshadowing in Primary Care: A Case Report of Delayed Diagnosis of Inflammatory Bowel Disease

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Abstract

Diagnostic overshadowing is common and well-documented in the medical field, often linked to mental health patients. There are dangers associated with this phenomenon [1], and our case report will highlight ways to avoid it, especially in primary health care settings. This case report sheds light on the phenomenon in common presentations to primary health care, such as irritable bowel syndrome (IBS). It will demonstrate how assumptions linking symptoms to stress can mislead clinicians and patients, resulting in a stress-related and IBS diagnosis. Ultimately, the correct diagnosis of ulcerative colitis, an inflammatory bowel disease (IBD) was confirmed by colonoscopy and biopsy, with subsequent treatment leading to complete resolution of symptoms.

Keywords: Irritable Bowel Syndrome; Inflammatory Bowel Disease; Ulcerative Colitis; Mental Health Patient; Diagnostic Overshadowing Phenomenon and Primary Health Care.

Introduction

Mental health patients have a higher risk of dying early and are more likely to have missed physical diagnoses. Diagnostic overshadowing, a complex and dangerous phenomenon, is well-known in the mental health field. However, it also applies to patients with physical health issues. Diagnostic overshadowing results from the interaction between the patient, clinician, and health system. Molloy et al. highlighted this in a published article, describing it as a multifactorial phenomenon influenced by a poor healthcare system and patients poorly communicating their symptoms, often linking them to mental health issues rather than considering the complete picture [1]. Harris et al. mentioned that 50% of mental health patients have chronic diseases, including diabetes, cardiovascular disease, and lung disease, increasing their risk of early death [1,2]. Hallyburton et al. stated that 15% of the world's population are mental health sufferers, mental

health patients die 10 years earlier than their peers, with two thirds of those deaths caused by heart disease and cancer - which is a significant number [3]. Firth et al. noted that this is partly due to unsafe lifestyle choices such as high rates of smoking, substance abuse, and unsafe sex, as well as contributing factors like poverty and stigma [4]. As mentioned, diagnostic overshadowing can be described as an interaction between patients, the healthcare system, and the medical team (including doctors and nurses). In the UK, the healthcare system provides equal access to services for all residents. However, the other two factors the patient and healthcare professionals contributed to the delayed diagnosis.

Case Presentation

We present the case of a 26-year-old female who suffered for eight years before being diagnosed with IBD. This case discusses the multifactorial phenomenon of diagnostic overshadowing that led to the delayed diagnosis. She struggled with gastrointestinal symptoms for the past nine years, including fatigue, vague lower abdominal and pelvic pains, and alterations in bowel habits, tenesmus, bloating, and flatulence. Her symptoms were initially

investigated in the private sector with only blood tests (FBC, LFT, CRP, U&E, TSH), which were normal. She was partly reassured by her stable symptoms and normal blood tests. When her GI symptoms flared up, she visited primary care and underwent further investigations which included a pelvic ultrasound and more blood tests. These results were normal. She was reassured and learned to cope with her symptoms. Six years before the diagnosis, she had one episode of rectal bleeding but did not seek medical attention due to stress, a busy social life, and anxiety about a potential IBD or endometriosis diagnosis. Two years before the diagnosis, she had another episode of rectal bleeding and consulted primary care, which conducted blood tests and a stool sample for culture and faecal calprotectin. The faecal calprotectin level was 1243. This resulted in a colonoscopy and biopsy which confirmed ulcerative colitis. She was subsequently started on sulfasalazine, resulting in complete resolution of symptoms. In discussing her case, she mentioned that her father had similar issues and was a nervous

person, which contributed to her anxiety and reluctance to seek a diagnosis. She was worried about being labelled like her father because of the similar symptoms. Her fear of a serious diagnosis further heightened her anxiety and stress. Worrying about her mental health and the anxiety surrounding her diagnosis, she was concerned about the impact it would have on her life, including her work and studies. She often described herself as an anxious person and frequently bit her fingernails due to stress. With numerous problems already in her life and a lot on her plate to handle, the additional worry of a potential cancer diagnosis, IBD, or endometriosis was overwhelming. The thought of undergoing tests like a colonoscopy, taking laxatives, and possibly being on long-term medication made her more reluctant to seek medical help. Despite these concerns, her symptoms are now controlled. She has adjusted and adapted, taking a greater interest in her health and lifestyle. She has found comfort in connecting with others through friends, family, and social media, which has helped her change her perspective on living with a chronic illness.

Discussion

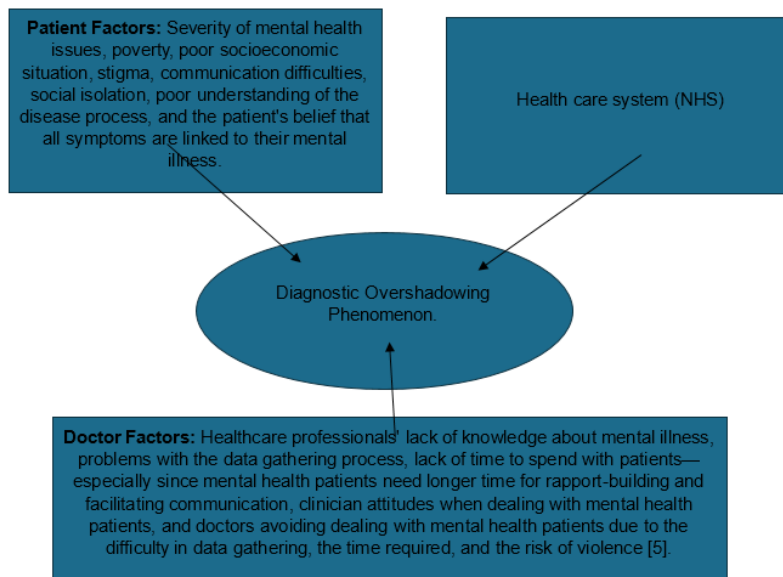


Figure 1: To avoid such phenomena, we can provide additional training to doctors on recognizing and preventing diagnostic overshadowing.

Diagnostic overshadowing is a well-known and documented phenomenon that can affect any healthcare professional. It results from the interaction of three components: the patient, the healthcare system, and the medical team. This case highlights two key issues: the doctor's perspective and the patient's perspective, which contributed to the delayed diagnosis of ulcerative colitis.

To avoid such phenomena (see Figure 1), we can provide additional training to doctors on recognizing and preventing diagnostic overshadowing. Patients with learning disabilities or mental health issues should have longer or double appointments, as they require more time to communicate their problems and for the clinician to build rapport. Ideally, these patients should receive consistent care from the same clinician, preferably in the morning when the doctor is fresh to establish the doctor-patient relationship and continuity of care. We can have alerts in the system to notify the person handling bookings about the need for double appointments, identifying vulnerable patients, and ensuring they see their named doctor to avoid locum doctors, within the available resources. These patients may benefit from written care plans and bringing a carer if preferred. Understanding the patient's perspective and providing thorough explanations of possible diagnoses along with robust safety netting can help prevent misdiagnoses. Conducting all necessary investigations in one setting, offering multiple examinations, and scheduling multiple face-to-face appointments for such a patient might help to avoid diagnostic overshadowing. Additionally, setting up follow-up appointments can also improve patient care and build rapport.

Reflecting on our case report, it is crucial to emphasize understanding the patient's perspective when they present with such symptoms. It is important to acknowledge the patient's worries and explain the possible diagnoses clearly. Elaborate on safety-netting strategies if the symptoms persist, and reassure the patient that alleviating their symptoms is a priority. It is important to convey that not all symptoms necessarily indicate a serious condition; for instance, IBS is a possibility but is often low on the list of concerns.

Many people live normal lives with conditions like IBD and endometriosis, as modern treatment modalities are advanced and effective. Advise patients against conducting their own internet searches about their symptoms, as this can lead to false information. Encourage them to seek information from reliable sources instead. If possible, conduct all necessary investigations in one setting, as in our case. This includes performing all relevant blood tests

(FBC, U+ES, LFT, CA125, CRP, ESR), an abdominal ultrasound (USS), stool samples for culture and faecal calprotectin, H. pylori test, and stool FIT test (Faecal Immunochemical Test).

While the results of the blood tests should not be the sole focus, performing these tests might be perceived as over-investigation. It's essential to reassure the patient about the long-term plan. If all results are clear, we might seek a gastroenterology opinion to determine the cause of her symptoms. Knowing the results will help us decide the appropriate route of referral, whether routine or urgent. In the meantime, we can initiate some form of treatment for IBS.

Offering an abdominal examination to this patient would be beneficial, as it builds rapport and trust. Seeing her face-to-face, if possible, will help her express her anxiety and reveal more about her worries, such as concerns related to her studies, work, and her father's issues with bowel, as well as any stigma she may be experiencing.

Finally, ensure to set up a follow-up appointment during the current visit and confirm it with the patient before she leaves.

Conclusion

Diagnostic overshadowing is a dangerous phenomenon consisting of interconnected parts that clinicians face daily, especially in primary care. Being aware of the factors discussed and having a good understanding of the phenomenon from the clinician's point of view can help avoid delays in diagnosis. A survey of clinical staff could be beneficial to assess their awareness of diagnostic overshadowing in the future.

References

1. Molloy R, Brand G, Munro I, Pope N. (2023) Seeing the complete picture: A systematic review of mental health consumer and health professional experiences of diagnostic overshadowing. *J Clin Nurs*. 32:1662-73.
2. Harris B, Duggan M, Batterham P, Bartlem K, Clinton-McHarg T, et al (2018) Australia's mental health and physical health tracker. 2018.
3. Hallyburton A. (2022) Diagnostic overshadowing: An evolutionary concept analysis on the misattribution of physical symptoms to pre-existing psychological illnesses. *Int J Ment Health Nurs*. 31:1360-72.
4. Firth J, Siddiqi N, Koyanagi A, Siskind D, Rosenbaum S, et al (2019) The Lancet Psychiatry Commission: a blueprint for protecting physical health in people with mental illness. *Lancet Psychiatry*. 6:675-712.
5. van Nieuwenhuizen A, Henderson C, Kassam A, Graham T, Murray J, et al (2013) Emergency department staff views and experiences on diagnostic overshadowing related to people with mental illness. *Epidemiol Psychiatr Sci*. 22:255-62.