NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Equality impact assessment

Vitamin B12 deficiency in over 16s: diagnosis and management

The impact on equality has been assessed during guidance development according to the principles of the NICE equality policy.

3.0 Guideline development: before consultation

3.1 Have the potential equality issues identified during the scoping process been addressed by the Committee, and, if so, how?
Age – The issue of older people potentially being missed because their symptoms may be presumed to be related to older age alone has been addressed in some of the recommendations. Increasing age, particularly in the over 65s and cognitive difficulties have been included in the recommendations for signs, symptoms and risk factors. The difficulty people with dementia and frailty have with buying or preparing food has also been listed as a dietary risk factor. A cross reference to the NICE guideline on Medicine adherence has been made when there are concerns about adherence which contains recommendations on advising people on the importance of taking medicine. A cross reference has also been made to the NICE guideline Decision making and mental capacity because cognitive impairment, dementia and delirium are associated with vitamin B12 deficiency. Disability – Unexplained fatigue and mental health problems are listed as signs or symptoms of B12 deficiency and the difficulty people with mental health conditions have with buying or preparing food has been listed as a dietary risk factor. Gender reassignment –Autoimmune conditions are listed as a risk factor. Pregnancy and maternity – Separate recommendations have been made in relation to pregnancy and breastfeeding where needed. These include different recommendations for diagnosis and threshold for when to diagnose a deficiency, considering treating when test results are indeterminate, the dose to use when offering oral vitamin B12 replacement and an earlier initial follow up appointment.

3.1 Have the potential equality issues identified during the scoping process been addressed by the Committee, and, if so, how?

Race – a recommendation was included to highlight that recent evidence shows that people from a Black family background may have a higher reference range for serum vitamin B12 concentrations than people from a white and Asian background. The committee recommend that this is taken into account when interpreting test results together with symptoms, signs and risk factors so possible deficiency is not missed. They also recommended that this group is considered for treatment if their test result is indeterminate.

Religion or personal belief – vegetarian and vegan diets, and diets excluding meat for religious or personal beliefs has been included in the recommendations as a risk factor that can lead to a deficiency.

Sex – autoimmune conditions has been included as a risk factor in the recommendations.

Socio-economic factors – people who do not follow a varied diet and cannot afford enough food that is rich in vitamin B12 are included in recommendations as dietary risk factors.

Other definable characteristics – there is a recommendation to consider intramuscular vitamin B12 replacement for people who may have issues accessing care, such as homelessness or being in prison. Homeless people may not be able to store medicines safely therefore there may be concern that people may not be adherent to treatment. It would be more practical for people to attend one appointment to receive intramuscular injections every two to three months than to be responsible for ordering medication on a regular basis and keeping the medication safe and taking the medication daily. Similarly, there may be concerns managing medication in prison and whether people can hold their medicines in-possession.

Children were removed from the scope of the guideline during development and after consultation with stakeholders.

3.2 Have any **other** potential equality issues (in addition to those identified during the scoping process) been identified, and, if so, how has the Committee addressed them?

Older people who are or have recently been in hospital with multimorbidity or frailty were identified as having complex medical needs. They are likely to be taking a few

different medicines on a daily basis. The committee recommended intramuscular vitamin B12 replacement is considered because having intramuscular injections at 2 to 3 month intervals would mean one less daily medicine for them to take and address any concerns with adherence to taking tablets. Intramuscular injections are also likely to manage their vitamin B12 deficiency more effectively.

3.3 Have the Committee's considerations of equality issues been described in the guideline for consultation, and, if so, where?

The issues have been addressed in the guideline recommendations listed in section 3.1, 3.2 and the respective evidence reports.

3.4 Do the preliminary recommendations make it more difficult in practice for a specific group to access services compared with other groups? If so, what are the barriers to, or difficulties with, access for the specific group?

People with no fixed address may have issues with access to treatment. These issues have been detailed under 'Other characteristics' in section 3.1.

People with dementia or cognitive impairment may not be able to accurately describe their signs and symptoms.

3.5 Is there potential for the preliminary recommendations to have an adverse impact on people with disabilities because of something that is a consequence of the disability?

No.

3.6 Are there any recommendations or explanations that the Committee could make to remove or alleviate barriers to, or difficulties with, access to services identified in box 3.4, or otherwise fulfil NICE’s obligation to advance equality?
Closer reviews of those at risk, for example by clearly stating review periods and having systems in place to ensure that those patients who are vulnerable attend their reviews and are followed up if they do not attend. For example, having a clinical review at 3 to 6 monthly intervals to assess symptoms and adherence as part of a comprehensive geriatric assessment. By considering diagnosis of B12 deficiency in those who are not able to communicate their concerns or symptoms, for example, dementia.

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