

ARTICLE REVIEW

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Introduction

The cases of prematurely born babies continue to be on the rise hence the need for proper measures to be put in place and ensure that such babies do not succumb to the condition of being underweight. Vitamin D dosages are important in increasing the bone density of underweight children (Anderson-Berry et al. 2017). In this respect, this brief explicates the article "Higher dose of vitamin D increases bone density in premature babies" in terms of how it applied the scientific method, its critique and lastly its relevance to the world and me.

Tracing the scientific method through the article

The article "Higher dose of vitamin D increases bone density in premature babies" based on the fashion in which it is designed fully subscribed to the steps that are the key identity markers of any scientific method. The first step of the scientific method as evidenced in the article is the making of a definite observation (Ary et al. 2018). In this respect, the premature babies are those who are born before the termination of the maturity period and as such, they end up being underweight. Such children were observed in terms of how their body masses responded to the different quantities of vitamin D (Anderson-Berry et al. 2017). the next step is the formulation of the research question or asking of the question which was what is the effect of the different quantities or dosages of vitamin D to the bone density in premature babies. This was then followed by the formulation of the testable explanation or a hypothesis which is the higher dose of vitamin D increases the bone density of the premature babies. The formulation of the hypothesis was followed by the drafting of the prediction to guide the experiment that was supposed to respond to the hypothesis and validate it (Robson, C. (2011). The prediction was then tested through the practical approach since this is the only way through which the evidence

to support the hypothesis could be adequately collected (Haig, 2018). The scientific method is built on evidence. The last step was the use of the results or the outcomes of the experiment to formulate novel predictions or hypothesis. It thus suffices to aver that the article under consideration fully applied the scientific method of investigating a given phenomenon.

The control group was the premature children who were given small dosages of vitamin D while the treatment group was that of the prematurely born babies who were given increased quantities of the vitamin D dosages (Anderson-Berry et al. 2017). The two groups were necessary since the investigation was meant at establishing the increased dosages of vitamin D to the weight of the bones of the premature babies.

The independent variable in the article was the effects of the increased dosages of vitamin D on the bone density of premature babies. The dependent variables included the different quantities of the vitamin D dosage on premature babies. This approach is important for any scientific method since it helps in narrowing down the focus of the research. This also helps in sustaining both the validity and reliability of the results or outcomes of the research.

Criticisms of the selected article

By all standards, the research control and treatment groups were not sufficient or appropriate for the study question and hypothesis. This is based on the fact that the control and treatment groups could have included healthy children who were born after the full term. The control groups should also have included the prematurely born babies who will not be given vitamin D dosages and have their bone densities observed within the same time frame. With such an approach, the degree of reliability and validity of the outcomes could be high enough to wade against any form of negative criticisms (Ary et al. 2018). The use of numerous control and

treatment groups could also have helped in establishing the overall effects of vitamin D on the bone densities of both the mature and prematurely born babies.

This was a worthwhile study since the cases of babies who are born prematurely continue to be on the rise. Most of such children end up dying owing to the improper care that they receive from the health facilities in which they are kept. The bones of such premature babies are usually very light and weak hence the need for proper measures to be taken to ensure that such children gets to the standard bodyweight. The study thus provides knowledge to the medical practitioners on how to administer the different quantities of vitamin D to the premature and underweight bodies to ensure that their bones can develop properly.

The relevance of this research article

The research article is relevant to the world since it will help in guiding how the medical practitioners will have to cater to the prematurely born babies whose bone density is usually very low. Such knowledge will also help in ensuring that such victims fully recover within a short time and resume normal growth to avoid any form of underdevelopment that may be permanent and render them incapacitated in the future. The research is also relevant to me personally since it will help me to understand the role of vitamin D in children and how such supplements should be administered to ensure that the affected victims do not suffer any permanent physical damages such as developing rickets.

Reference

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