

**Perceived Sustainability and Reliability of Naturopathic Birth Control Methods; a
Study in Ningo- Prampram, Ghana.**

Original Research Article

ABSTRACT

Background: According to worldwide estimates, some 600,000 women die each year of pregnancy-related causes, and another 75,000 die following unsafe abortions. At least 200,000 of these maternal deaths are attributable to the failure or lack of contraceptive services. Naturopathic birth control methods have been proven to be a safe and effective way to prevent unwanted pregnancies

Aim: this study aimed to examine the use of naturopathic birth control methods and to explore the perceived reliability and perceived sustainability of naturopathic birth control methods among adults.

Methods: A cross-sectional descriptive survey design was used. Adults in the Ningo-Prampram Municipality were randomly sampled to select 100 respondents, who were then administered with the structured questionnaire. Data was analyzed using the Statistical Package for Social Sciences (SPSS) version 24. Results were presented using descriptive metrics.

Results: Majority of the respondents (39.6%) strongly agree to the use of naturopathic birth control methods 12 months. 34.1% strongly agreed as against 2.2% who strongly disagreed to the reliability of naturopathic birth control methods. 38.5 showed agreement as against 19.8% showing disagreement on the reliability of naturopathic birth control methods. 49.5% agreeing strongly to its sustainability, as against 3.3% disagreeing strongly.

Conclusion: It is indicative that given the benefits of naturopathic birth control methods, more adults are in strong agreement of its usage, reliability and sustainability, since it presents the user with no later life health issues such as infertility and complications in parturition. It is therefore important that, the issues of Sexually Transmitted infections (STIs) are addressed with abstinence and or fidelity with one sexual partner.

Keywords: Birth control, Naturopathy, Sexually Transmitted Infections, Fidelity, Partner

INTRODUCTION

According to the World Health Organization (WHO), naturopathic contraception or birth control methods are those methods which require a person to consistently monitor certain naturopathically occurring bodily processes which are indicative of fertility, so as to avoid pregnancy during those periods (WHO, 1998). They include specific actions that people can naturopathically do to help prevent unintended pregnancy (Brian Levine, 2019). Naturopathic contraceptive methods do not involve the use of any external devices or medication, neither do they have any side effects. There are six standard types of naturopathic birth control methods. These include abstinence, coitus interruptus, basal body temperature, Billings, calendar and lactation amenorrhea methods.

The abstinence method involves not having sexual intercourse with a partner, thereby eliminating all chances of sperm fertilizing an egg. A recent study by Dhillon et al., (2021) reported a higher proportion of less-educated women use this method. The coitus interruptus or withdrawal method relies on complete self-control, where the man must have an exact sense of timing to withdraw his penis in time (Weiss, 2020). With the fertility awareness method, a woman monitors her body to determine when she is most fertile, while the basal body temperature method allows for tracking the body's temperature throughout the menstrual cycle to help predict ovulation. Body temperature typically rises around ovulation, from 96–98°F (35–36°C) to 97–99°F (36–37°C) (Steward & Raja, 2020)

With the Billings method, cervical mucus is observed for changes in color, texture, and volume throughout the menstrual cycle (Najmabadi et al., 2021), while the calendar method involves tracking the menstrual cycle and manually working out which days are most and least fertile. Marston and Church (2016) are of the view that this method is not effective. Finally, lactation amenorrhea requires continuous breastfeeding which can postpone ovulation for up to six months after giving birth. The lactational amenorrhea method (LAM) is a highly effective for preventing subsequent pregnancy (98%) during the first 6 months postpartum method of contraception for postpartum women (Abraha et al., 2018).

According to worldwide estimates, some 600,000 women die each year of pregnancy-related causes, and another 75,000 die following unsafe abortions. At least 200,000 of these maternal deaths are attributable to the failure or lack of contraceptive services. In addition to preventing mortality, effective contraception improves maternal health (Grimes, 2000).

These statistics reinforce the importance of conducting ongoing advocacy and mobilization with governments, donors, and implementing agencies across the humanitarian development continuum to prioritize contraception as part of Sexual and Reproductive Health Research (SRH) in humanitarian settings, from preparedness to response to recovery, recognizing that contraception is lifesaving and part of the standard of care in emergencies. SRH is also critical to continue building the evidence base on effective contraceptive programming (Women Refugee Commission, 2021). Reliable contraception allows women to invest in their human capital with much less risk and so achieve higher education and professional degrees. By separating sex from procreation and giving women more control over their bodies, it also lifted the obligation to marry early (Carl Djerassi, 2015).

The population of Ghana has seen substantial increase from 24 million to 31 million in the last 10 years as Ningo-Prampram saw its increment from 70,923 to 87,393, a growth rate of 2.9% at the national level and 2.3% at the local level of Ningo-Prampram. Yet resource levels and land size have not expanded to correspond with the increases in population, thus leading to multiple sale of lands and communal conflicts and deaths. There have also been outbreaks of diseases such as cholera and skin conditions due to congestion and lack of access to portable water by the population. The use of naturopathic birth control methods must therefore be given attention in promoting education and awareness to control the exponential growth in the population. It is against this background that this study seeks to assess the use of naturopathic birth control methods among adults in the Ningo-Prampram Municipality of the Greater Accra Region

Research Objectives

Specifically, this study sought to:

1. investigate the use of naturopathic birth control methods over the past twelve months among adults in Ningo-Prampram.
2. examine the perceived reliability of naturopathic birth control methods among adults.
2. examine the perceived sustainability of naturopathic birth control methods among adults.

Methodology

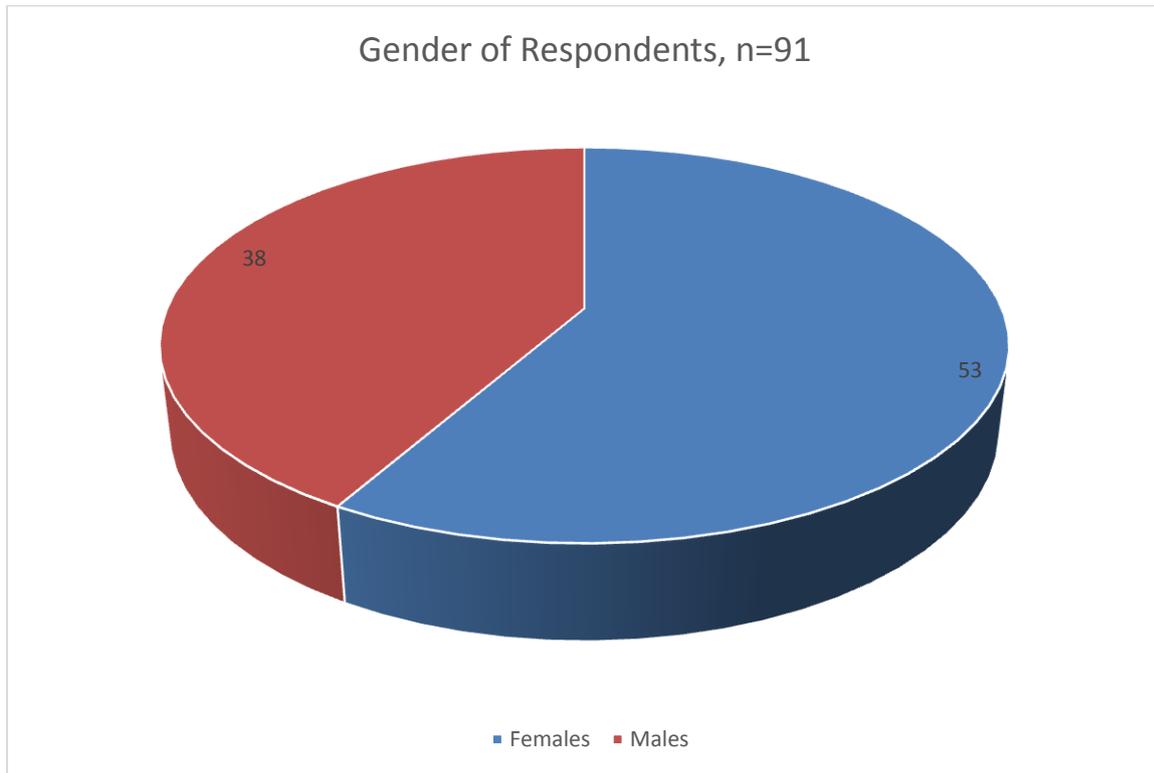
This study employed a quantitative approach using a cross-sectional survey design. Considering the accessible population of approximately 150 adults (Ghana Statistical Service, 2020), a total of 100 adults were randomly selected and administered with the structured questionnaire which was used for this study. The questionnaire, which was adopted from previous scholarly works by Katz et al. (2005), Granovetter (2004), Heikkilä et al. (2009), Okten & Osili (2004), Ahlin & Townsend (2007) and Godquin & Quisumbing (2005), employed a 5-point likert scale and was pretested among young adults within a different community in the Greater Accra Region. The questionnaire was validated by an expert in SRH and a Chronbach Alpha coefficient of 0.682 derived following pretesting, indicating a satisfactory level of internal consistency. The inclusion criteria for this study included adults aged between 18 and 50 years, who had used naturopathic birth control methods before and were willing to participate in the study. Data was analyzed using SPSS version 24 and findings presented using descriptive metrics, visually displayed using graphs and charts. Prior to data analysis, final data collected from the field were verified for careless scoring, inaccurate responses, and missing elements before capturing them into SPSS. Data captured were checked for data entry errors, outliers, missing values, and normality as stipulated by Field (2005) and Hair et al., (2010).

Ethical considerations adhered to include informed consent, privacy, confidentiality, voluntariness, non-deception and *primum non nocere*. Ethical approval was sought from the Nyarkotey College of Holistic Medicine ethics committee.

Findings

Out of 100 questionnaires administered to respondents, 91 were retrieved by the researcher which translate to a response rate of 91%.

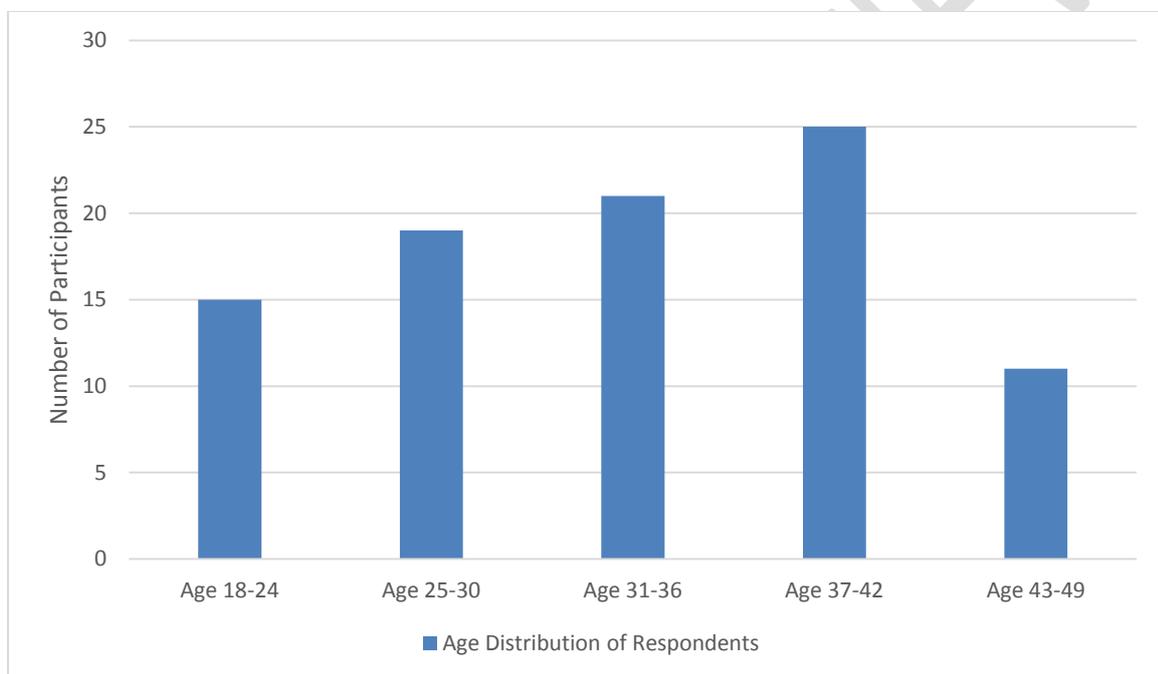
Figure 1: Gender of Respondents



Source: Field Data, 2021

Figure 1 is a distribution of the respondents' gender. From figure 1, the number of female respondents was 53, representing 58% while their male counterparts was 38, representing 42% of the samples. Thus, females played an integral role in the study than their male counterparts. And this could be because females are more concerned about their reproductive health issues than males.

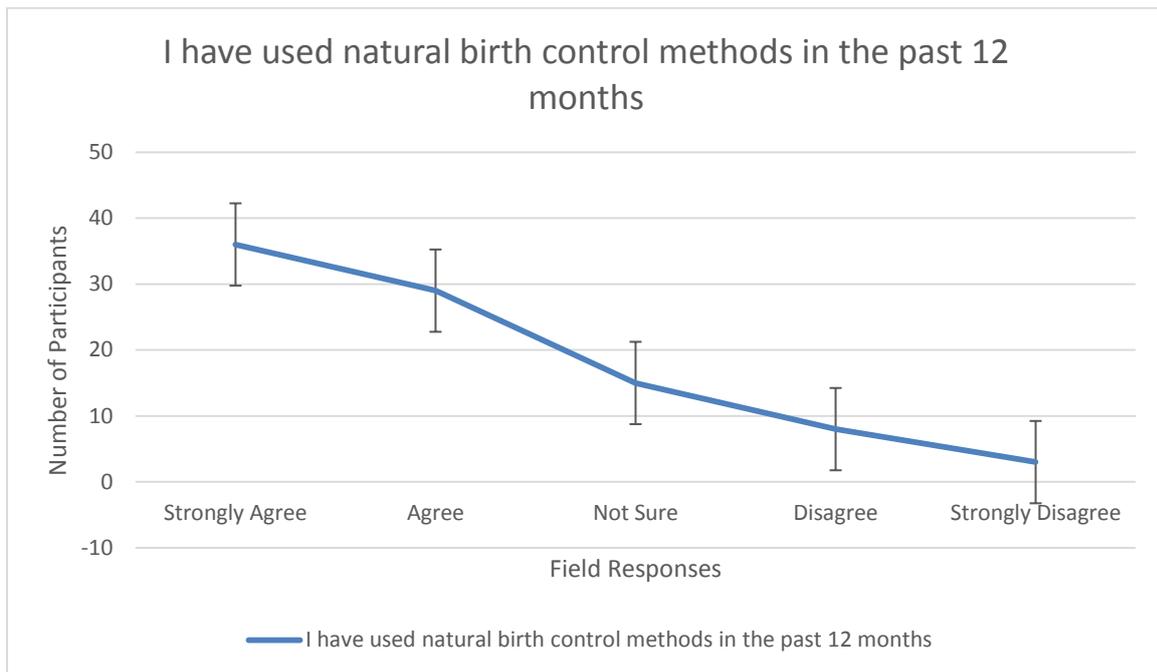
Figure 2: Age Distribution of Respondents



Source: Field Data 2021

Figure 2 provides a distribution of the ages of the respondents for the study. According to figure 2, 16.5% and 12.1% of the respondents were aged between 18-24 and 43-49 whereas 20.9%, 23.1% and 27.5% were aged between 25-30, 31-36 and 37-42 years respectively. From these findings, it could be inferred that, majority, that is 82.4% of the respondents, between the ages 25-49 are of child bearing age.

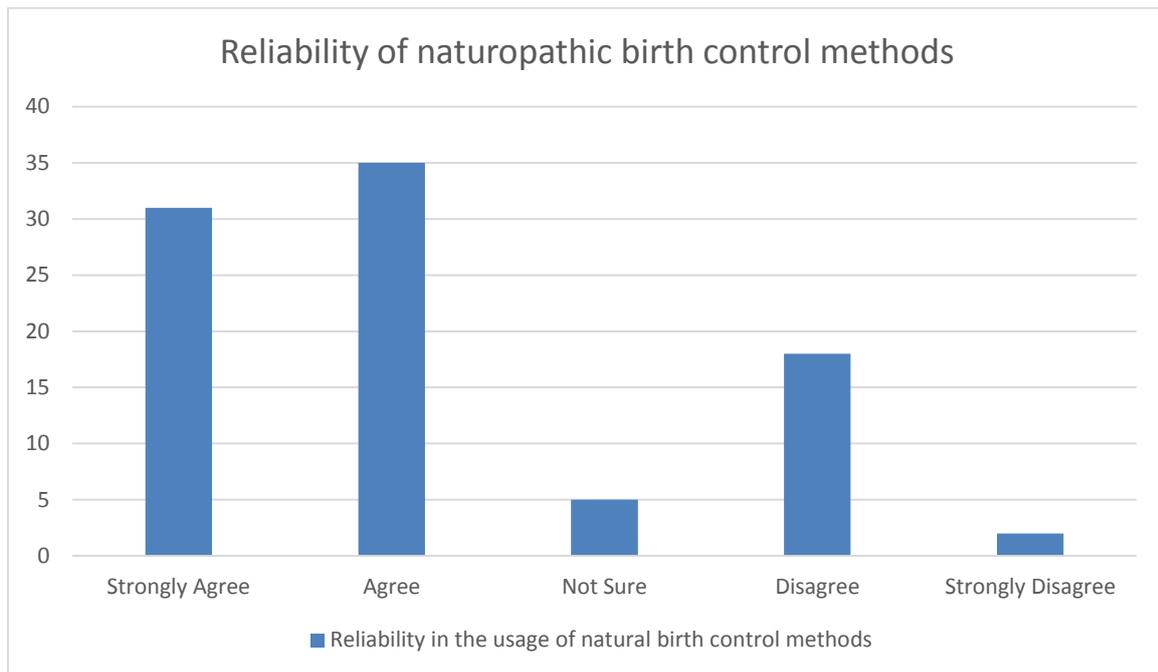
Figure 3: Use of Naturopathic Birth Control Methods in Past 12 Months



Source: Field Data 2021

Figure 3 assessed the usage of birth control methods by respondents in the past 12 months. It came out that, majority of the participants, 39.6% indicated that they strongly agree to the use of naturopathic birth control methods such as the withdrawal method in the past 12 months as against 3 out of the 91 respondents disagreeing strongly. Again, 31.9% of the respondents showed agreement to the use of naturopathic birth control methods in the past 12 months as against in 8 respondents disagreeing. Only 15 out of the 91 respondents, that is 16.5% were not sure of their use of naturopathic birth control methods in the past 12 months. Overall, 65 respondents or 71.4% agreed in their usage of naturopathic birth control methods compare with 26 or 28.5% who were not sure, disagreed or strongly disagreed to their use of naturopathic birth control methods in the past 12 months.

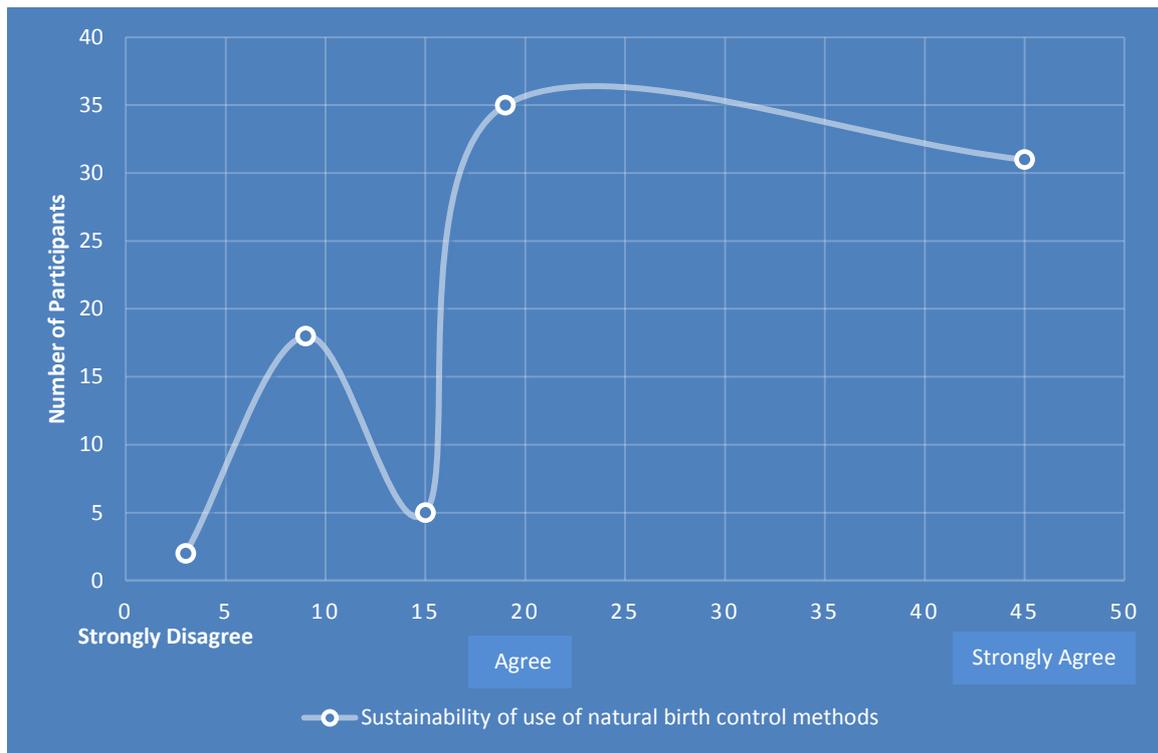
Figure 4: Perceived Reliability of Naturopathic Birth Control Methods



Source: Field Data 2021

Figure 4 showed how respondents perceived the reliability of naturopathic birth control methods the usage and results indicated that, 34.1% strongly agreed as against 2.2% who strongly disagreed to the reliability of naturopathic birth control methods. On the other hand, 38.5 showed agreement as against 19.8% showing disagreement on the reliability of such birth control methods. Only 5.5% were not sure of the reliability of naturopathic birth control methods within research period. Overall, 72.5% perceived naturopathic birth control methods to be more reliable as compared with 27.5% who were not sure, disagreed or strongly disagreed to the reliability of naturopathic birth control methods.

Figure 5: Sustainability of the use of Naturopathic Birth Control Methods



Source: Field Data 2021

In figure 5, respondents' perceived sustainability of naturopathic birth control methods was measured which showed a result of 49.5% agreeing strongly to its sustainability, as against 3.3% disagreeing strongly. On the other hand, 20.9% and 9.9% showed agreement and disagreement respectively for the sustainability of naturopathic birth control methods. However, 15 respondents, representing 16.5% were not sure of the sustainability of naturopathic birth control methods. In all, 64 out of the 91 respondents, representing 70.3% showed positive perception of the to sustainability of naturopathic birth control methods.

Discussion

The use of naturopathic birth control methods elicited positive response among adults in the Ningo-Prampram municipality. Opinions expressed by the respondents are in strong support of the use of naturopathic birth control methods. This study revealed that majority of adults in the Ningo-Municipality have used naturopathic birth control methods within the last 12 months. This is an indication of frequency of use of naturopathic birth control methods

among adults and is in line with findings by Kavanaugh & Jerman, (2017) whose study revealed an increase in the use of naturopathic birth control methods between 2008 and 2014. The second objective of the study sought to explore the extent to which adults believe that naturopathic birth control methods are reliable. Results for this objective also revealed that adults are highly of the view that these birth control methods are reliable. This finding is corroborated by Smoley & Roginson, (2012) who's study revealed a reliability rate of 95%

Lastly, the study, in the third objective, sought to explore the extent to which adults believe that naturopathic birth control methods are sustainable. Findings revealed that the adults largely perceived naturopathic birth control methods as being sustainable. These findings are further in line with Kavanaugh & Jerman, (2017) and Smoley & Roginson, (2012).

Conclusion

This study sought to examine the level of use, perceived reliability and perceived sustainability of Naturopathic birth control methods amongst adults. The study revealed that adults in the Ningo-Prampram Municipality in Ghana use naturopathic birth control methods, and believe that such methods are reliable and sustainable.

In light of this, the conclusion can be drawn that, making information and educational resources available timeously on both naturopathic and artificial methods will provide an assuring way of controlling births to curtail the exponential growth in population which has the potential of escalating the spread of diseases, creating conflicts as national resources continue be disproportionately meagre.

Although this study sought to advocate a sole usage of naturopathic birth control methods due to the side effects exhibited in the use of synthetic methods, it is important to note that naturopathic family planning methods may not be reliable in the prevention of STIs, one cannot rely solely on the naturopathic methods much as one cannot apply only the artificial methods.

Limitations

Despite the rigorous nature of the study, some limitations were observed. Due to the sample size of 100 respondents, the results of the study may not be generalizable to a larger

population. Further, the quantitative approach did not allow for more in-depth information to be collected.

Declarations

Ethical Approval

Ethical consideration for this research was obtained from Nyarkotey College of Holistic Medicine.

- **Availability of data and materials**

Data for the study can be obtained from the corresponding author upon reasonable request

- **Competing interests**

We declare no conflict of interest in this study.

- **Funding**

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