Role of safe space in improving menstrual awareness and menstrual hygiene practices among adolescents in Zamfara: a case study of REACH project intervention

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ABSTRACT

Background: Menstrual awareness and hygiene practices have been a challenge for adolescent girls in African countries and Nigeria inclusive which subsequently affects their health, and wellbeing. The aim of the study was to evaluate the effects of REACH project intervention in improving knowledge and practice of menstrual care among adolescent girls.

Methods: A post-test only non-equivalent groups quasi-experimental design was adopted with Kaura Namoda and Talata Mafara as the intervention Local Government Authorities (LGAs) and Bungudu and Maru as the control LGAs conducted between August 2021 to October 2021. Quantitative approach was employed using self-developed questionnaire for data collection. Multi-stage sampling technique was used. A total of 400 questionnaires were administered with 200 each for control and intervention LGAs.

Results: The result of the study shows that, adolescents in the REACH Project intervention communities have higher level of awareness and more likely to practice menstrual hygiene as compared to non-REACH intervention communities. Therefore, it is recommended that, safe space strategies should be adopted in any matters related to adolescents sexual and reproductive health.

Conclusions: Safe space is effective in improving adolescents sexual and reproductive health.

Keywords: Adolescents, REACH, Menstruation, Hygiene, Awareness, Practice

INTRODUCTION

Adolescence is a transition period from childhood to adulthood life during which secondary sexual characteristics take place. Hormonal changes in this stage of life lead to an accelerated transformation which include rapid physical, cognitive, and psychosocial growth.1 As part of the physiological changes menstruation is the natural event which involves monthly loss of blood from the private part of adolescents.2 According to United Nation Children’s Fund (UNICEF), as a normal phenomenon, menstruation still is bounded by several misbeliefs or misconceptions and girls do not feel free to discuss it with other individuals in the public, classroom and even it can be a great taboo to discuss in the family.3

Studies from many low-income countries show that many girls start menstruation without any preparation for it and does not know the reason and normalcy of the monthly bleeding.4 This lead to stress, confusion, shame, and fear among adolescents due to a lack of knowledge and poor menstrual hygiene practices.4,5 Additionally, there is a
report of teasing and harassment from boys and classmates, not standing in class to answer questions, concerns about odour, and an embarrassing menstrual leak in the classroom among adolescent girls. Moreover, adolescent girls reported menstrual pain and lack of effective materials for safe menstrual hygiene practices as a reason for not going to schools. As a result, they were reported frequently using folded, bunched up, or sewed cloth, tissues, or toilet paper, scraps of old cloth, or strips of an old blanket, which often leak and made school attendance difficult.

Despite increasing local and global attention to menstrual hygiene practice and its impact on adolescent girls as part of ASRH, substantial knowledge gaps exists. Menstruation and menstrual hygiene practice continue to be a monthly challenge for women and girls across Nigeria. In line with the global effort to improve sexual and reproductive health of adolescents, REACH Project was implemented. The project adopted a safe space approach in creating awareness about sexual and reproductive health among adolescents in Zamfara, Katsina and Gombe states. Although few studies highlighted the level of knowledge on menstruation and menstrual hygiene practice among school adolescent girls in Nigeria, that has not been established in the Zamfara, katsina and Gombe states where REACH project was implemented. Therefore, this study will evaluate the effects of the REACH project safe space approach on menstruation and practice.

METHODS

Study type

A post-test only non-equivalent groups quasi-experimental design was adopted. Quantitative approach was employed using self-developed questionnaire for data collection. Multi-stage sampling technique was used where 2 LGAs were randomly selected to compare with the 2 implementing LGAs. Each LGA was divided into ten wards. list of the communities was obtained and one community from each ward was randomly selected by lottery method and from each community ten (10) participants were taken using systematic sampling to complete 400 samples size. (4 LGAs, 40 wards, 40 communities).

Instrument for data collection

For the data collection, self-developed questionnaire was used. 200 for the intervention group (Talata Mafara and Kaura Namoda) and 200 for the Control Group (Bungudu and Maru). The questionnaire has three sections; Section A deals with the demographic information of the respondents, Section B has 13 questions, testing the awareness of individual about menstruation and menstrual hygiene practice and Section C has 12 questions, it captures the adolescent practice towards monthly periods (menstrual hygiene practice)

Validity

The questionnaire was submitted for review by panel of 5 experts on ASRH for face and content validity. For content validity ratio, (CVR) each item was assessed by the panel using a 3-point scale (essential, useful but not essential, not necessary). The feedback received and CVR was calculated using Lawshe (1975), method: CVR= ne- (N/2)/N/2 For awareness section the CVR is 1.2 (minimum acceptable value is 0.99 for 5 panel) while CVR for practice was 1.1.

Reliability

Crombach alpha obtained from the pilot study as the internal consistency reliability measure with 10 adolescents was 0.85 for awareness and 0.74 for practice.

Study place

The study is conducted in Zamfara as part of the REACH project implementation state. The four Local Government Authorities (LGAs) were chosen and these are Kaura Namoda and Talata Mafara as the intervention Local Government Authorities (LGAs) and Bungudu and Maru as the control LGAs.

Study period

The study is conducted between August 2021 to October 2021.

Selection criteria

The adolescent include in the study are those who graduated from REACH project safe spaces (for intervention LGAs), between the ages of 15-19, girls and live in Zamfara.

Procedure

Respondents were recruited based on the inclusion criteria. Those in the intervention group were traced through the graduating register and contacted for their willingness to take part. Those who agreed were given consent form to sign or sign for. Two LGAs were randomly selected to compare with the 2 implementing LGAs. Each LGA was divided into ten wards. list of the communities was obtained and one community from each ward was randomly selected by lottery method and from each community ten participants were taken using systematic sampling to complete 400 samples size. (4 LGAs, 40 wards, 40 communities). In each committee the village heads were informed and take part in mobilization of respondents. Snacks were given to the respondents after responding to the questionnaire.
**Ethical approval**

This is obtained from ethical committee of ministry of health Zamfara state.

**Statistical analysis**

The data was analysed using Statistical package for social sciences (SPSS) version 22. This included descriptive statistics and inferential statistics. Independent and paired t-test statistical tests were run.

**RESULTS**

The table above shows that majority of the respondents 301 (75.25%) are between the age of 15-17 and are majority Muslim by religion 385 (96.25).

| Variables                  | Category      | Number | Percentage |
|----------------------------|---------------|--------|------------|
| Respondents age in Years   | 15-17         | 301    | 75.25      |
|                           | 18-19         | 99     | 24.75      |
| Religion                   | Islam         | 385    | 96.25      |
|                           | Christian     | 15     | 3.75       |
| Educational Level          | Primary       | 229    | 57.25      |
|                           | Secondary     | 74     | 18.5       |
|                           | Islamiyah     | 97     | 24.25      |
| Marital Status             | Unmarried     | 332    | 83         |
|                           | Married       | 63     | 15.75      |
|                           | Divorce       | 5      | 1.25       |

**Table 1: Demographic characteristics.**

The table 2 that, significant difference exists between REACH and Non-REACH implementing communities in terms of awareness of menstrual hygiene practice. Therefore, the null hypothesis is rejected (p=0.000). Similarly, statistical difference exists in terms of practice of menstrual hygiene practice among adolescents in the two groups (p=0.000). This can be evaluated as having high level awareness of adolescents in the REACH implementing communities as compared to non-REACH implementing communities.

| Variables                  | RIC     | N   | Mean | SD   | P value |
|----------------------------|---------|-----|------|------|---------|
| Menstrual Awareness        | 200     | 3.7 | 0.164| 0.000|
| Adolescent menstrual hygiene Practice | 200 | 3.2 | 0.648| 0.000|

**DISCUSSION**

From the findings of the study, the 75.25% of the respondents are between the age of 15-17 years and 96.25% are Muslim by religion. 57.25% finished primary school. Majority (83%) are unmarried. This could be as a result of the majority are between the ages of 15 and 17.

On the side of awareness of the adolescents in REACH Project intervention communities (graduates of safe space sessions), the study establishes high level awareness of menstruation and menstrual hygiene among adolescents (X=3.78, SD=0.16481).

Similarly, for the menstrual hygiene practice, the study found the adolescents who attended safe space sessions to be good (X=0.7892, SD=0.09704). Similarly, Gizachew, In his study revealed three-fourth of adolescents had good overall knowledge but two-third of them had inadequate menstrual health practice. In similar study identify about 50% of the respondents do not have Knowledge about the organ from where bleeding occurs. The finding of the current study is in agreement with the findings of Birhane and Serbessa, in Ethiopia where the menstrual hygiene practice was found to be good among adolescent girls.

For the level of awareness of menstruation and menstrual hygiene, between REACH project intervention and non-intervention communities, the study establishes the relationships to be statistically significant and thereby rejecting the null hypothesis (p=0.000). This shows that, adolescents who attended safe space sessions are more aware about menstruation and menstrual hygiene practice (p=0.000, X=3.78, SD=0.16481), than those who did not

Cut off mean: 0.9= No awareness, 1-1.9=low awareness, 2-2.9 = moderate awareness, 3-4=high level awareness. Good practice= 0.5 - 1.0, poor practice= 0.0 – 0.49

In the table 1, the mean awareness of adolescents is 3.78 which indicate high level awareness of menstruation. Similarly, the menstrual hygiene practice is also good as shown in the table with a mean of 0.7892.
(X=3.2488, SD=0.64842). However, in a study conducted in India\textsuperscript{10}, shows that, majority (60\%) of the adolescents in the rural areas still believe in superstitions as relate to menstrual hygiene practice. The same study also reported that, majority (77\%) of the adolescent girls did not change their pads or cloths more than two times during menstruation and hence indicated low hygiene practice during menstruation. As it relates to this study and the outcome of REACH project intervention, it is clear that safe space can be used in providing information regarding ASRH and that can lead to good menstrual hygiene practice.

**Limitation**

The study limitation is that of not able to take pre-test data of the control group. It is also limited to Zamfara without including other REACH project implementing LGAs.

**CONCLUSION**

Safe space is effective in improving adolescents sexual and reproductive health.

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