Student's Journal of Health Research Africa
e-ISSN: 2709-9997, p-ISSN: 3006-1059
Vol.7 No. 3 (2026): September 2026 Issue
https://doi.org/10.51168/m5f2d336
Original Article

Effectiveness of an awareness campaign on knowledge regarding the one stop centre programme among adolescent girls in selected higher secondary schools of kanpur, uttar pradesh: a quasi-experimental study

Alka Devi[1], Anamika Biswas[1], Angelin Anto[1], Anju Kumari[1], Ankita Maddhesiya[1], Minu S. R.[2*]

[1] B.Sc. Nursing Student, Faculty of Nursing, Rama University, Kanpur, Uttar Pradesh, India
[2] Professor and Vice Principal, Department of Child Health Nursing, Faculty of Nursing, Rama University, Kanpur, Uttar Pradesh, India

Abstract

Background

Violence against women and girls is a major public health and human rights concern, and adolescent girls often do not know where to seek help. The One Stop Centre (OSC), or Sakhi, programme provides integrated medical, police, legal, psychosocial and temporary shelter support under one roof. This study assessed the effectiveness of an awareness campaign on knowledge regarding the OSC programme among adolescent girls.

Methods

A quasi-experimental, one-group pre-test–post-test study was conducted among 60 adolescent girls aged 13–18 years, selected by convenience sampling from two higher secondary schools in Kanpur, Uttar Pradesh. Knowledge was measured with a validated, self-structured 30-item questionnaire before and seven days after a structured awareness campaign. Data were analysed using descriptive statistics, the paired t-test and the chi-square test, with $p < 0.05$ considered significant.

Results

At pre-test, 31 (51.7%) girls had inadequate and 29 (48.3%) had moderate knowledge; none had adequate knowledge. After the campaign, 59 (98.3%) had adequate and 1 (1.7%) had moderate knowledge. The mean knowledge score increased from 15.15 ± 4.53 to 28.25 ± 1.38 (mean difference 13.10; 95% CI 11.90–14.30; $t = 21.83$, $df = 59$, $p < 0.001$). Pre-test knowledge was significantly associated with age, but not with place of residence, type of family, religion or monthly family income.

Conclusion

The awareness campaign produced a large and statistically significant improvement in adolescent girls' knowledge of the OSC programme.

Recommendation

OSC awareness sessions should be built into routine school health and adolescent programmes with periodic reinforcement, and controlled multicentre studies should test long-term retention and actual help-seeking.

Keywords: *Adolescent girls; awareness campaign; gender-based violence; health education; One Stop Centre; Sakhi; school health; violence against women*
Submitted: *June 20, 2026* ***Accepted:*** *July 25, 2026* ***Published:*** *September 30, 2026*

Corresponding author: *Dr. Minu S. R.,*
Email: sr.minu885@gmail.com
Professor and Vice Principal, Department of Child Health Nursing, Faculty of Nursing, Rama University, Kanpur, Uttar Pradesh, India.

Introduction

Adolescence, the period between 10 and 19 years of age, is a phase of rapid physical, cognitive and social development in which health-related knowledge and behaviours are formed that shape adult life [1]. Adolescent girls remain exposed to the forms of violence seen in childhood, such as corporal punishment, abuse within the family and violence in school, while also facing new risks, including partner violence, sexual harassment and child marriage [2]. Exposure to violence in this period has both immediate and lasting effects on mental and physical health and on educational attainment [2].

Violence against women and girls is one of the most widespread violations of human rights. The latest World Health Organization (WHO) estimates indicate that nearly one in three women worldwide, about 840 million, have experienced intimate partner violence or non-partner sexual violence during their lifetime, a proportion that has changed little since 2000. In the previous 12 months alone, 316 million women (11% of those aged 15 years and above) experienced physical or sexual violence by an intimate partner, including an estimated 12.5 million adolescent girls aged 15–19 years [3]. At its most extreme,

Student's Journal of Health Research Africa
e-ISSN: 2709-9997, p-ISSN: 3006-1059
Vol.7 No. 3 (2026): September 2026 Issue
https://doi.org/10.51168/m5f2d336
Original Article

about 140 women and girls were killed each day in 2023 by a partner or family member, equivalent to one death every 10 minutes [4].

In India, 4,48,211 cases of crime against women were registered in 2023, a rate of 66.2 per lakh women, and Uttar Pradesh reported the highest number of cases among all states [5]. Analysis of the fifth National Family Health Survey (NFHS-5, 2019–2021) estimated the weighted prevalence of domestic violence at 31.2% [6], and a systematic review of a decade of Indian studies reported a median lifetime prevalence of 41% [7]. A recent analysis of the UDAYA survey showed that violence against adolescents is pervasive in Uttar Pradesh and Bihar, the two most populous and socio-economically disadvantaged states, with adolescents from deprived backgrounds carrying a disproportionate burden [8].

Help-seeking after violence remains low. In NFHS-5, only 14.2% of women who had experienced physical or sexual intimate partner violence sought any help, most of it from family members; among formal sources, the police were approached most often [9]. Earlier survey rounds showed that only about 1% of affected women sought formal help [10], and WHO notes that between 55% and 95% of survivors never report the abuse or use support services [3]. Lack of knowledge about where and how to obtain help is one of the barriers that can be addressed through education.

The One Stop Centre (OSC) scheme, popularly known as Sakhi, was implemented by the Ministry of Women and Child Development from 1 April 2015 and is now a component of the "Sambal" sub-scheme of Mission Shakti. Each district-level OSC offers women and girls affected by violence, in private or public spaces, integrated access to emergency response and rescue, medical assistance, police assistance in lodging complaints, legal aid and counselling, psychosocial counselling and temporary shelter under one roof, and is linked with the Women Helpline (181) and the Emergency Response Support System (112) [11]. By December 2023, 752 OSCs were operational and had assisted more than eight lakh women [12]. However, these services can only be used if potential users know about them; survivors attending comparable one-stop crisis centres in Bangladesh reported having little awareness of the services before a crisis occurred [13].

Schools offer an efficient platform for reaching adolescent girls before they need such services. School-based programmes on gender-based violence and abuse prevention have improved students' knowledge and their understanding of whom to approach for help [14,15], and adolescence is the stage at which attitudes towards violence and gender roles are still being formed [16,17]. Despite the size of the OSC network, there is little published evidence on how much adolescent girls know about the OSC programme or on whether a brief school-based campaign can improve that knowledge, particularly in Uttar Pradesh. The present study was therefore undertaken to assess the effectiveness of an awareness campaign on knowledge regarding the OSC programme among adolescent girls in selected higher secondary schools of Kanpur.

Objectives

1. To assess the pre-test level of knowledge regarding the One Stop Centre programme among adolescent girls.
2. To evaluate the effectiveness of an awareness campaign on knowledge regarding the One Stop Centre programme by comparing pre-test and post-test knowledge scores.
3. To determine the association between pre-test knowledge scores and selected socio-demographic variables.

Hypotheses (tested at $p < 0.05$)

- **H_{01}:** There is no significant difference between the mean pre-test and post-test knowledge scores regarding the OSC programme among adolescent girls.
- **H_1:** There is a significant difference between the mean pre-test and post-test knowledge scores regarding the OSC programme among adolescent girls.
- **H_{02}:** There is no significant association between pre-test knowledge scores regarding the OSC programme and selected socio-demographic variables.
- **H_2:** There is a significant association between pre-test knowledge scores regarding the OSC programme and selected socio-demographic variables.

Materials and methods

Study design and approach

A quantitative research approach with a quasi-experimental, one-group pre-test–post-test design was used. The awareness campaign was the independent variable and knowledge regarding the OSC programme was the dependent variable. Age, place of residence, type of family, religion and monthly family income were studied as socio-demographic variables. The report follows the Transparent Reporting of Evaluations with Nonrandomized Designs (TREND) guidance where applicable.

Study setting and period

The study was conducted in two co-educational higher secondary schools in Kanpur, Uttar Pradesh, India: Prabhat Public Senior Secondary School and Sardar Patel

Student's Journal of Health Research Africa
e-ISSN: 2709-9997, p-ISSN: 3006-1059
Vol.7 No. 3 (2026): September 2026 Issue
https://doi.org/10.51168/m5f2d336
Original Article

Intermediate College. Both schools serve students from urban and peri-urban/rural areas of Kanpur and teach in Hindi and English. The schools were selected because they were accessible to the investigators and their administrations agreed to participate. The study was conducted under the Faculty of Nursing, Rama University, Kanpur. Participant recruitment and pre-test data collection took place from 5 to 10 January 2026; the pre-test and awareness campaign were conducted on 12 January 2026 at Prabhat Public Senior Secondary School and on 14 January 2026 at Sardar Patel Intermediate College, and post-test data were collected on 19 and 21 January 2026, respectively.

Population and participants

The target population comprised adolescent girls studying in higher secondary schools of Kanpur; the accessible population was adolescent girls aged 13–18 years studying in the two selected schools.

Inclusion criteria

Adolescent girls aged 13–18 years who were willing to participate, whose parent or guardian gave consent, and who could read and write Hindi or English.

Exclusion criteria

Girls who were absent on the days of data collection or the intervention, and girls who could not understand the language of the questionnaire.

Sample size

The adequacy of the sample was verified with the standard formula for comparing paired means [18]: $n = (Z_{1-\alpha/2} + Z_{1-\beta})^2 / d^2$, where d is the standardised mean difference (mean difference ÷ standard deviation of the differences). Assuming a conservative medium effect size (d = 0.5), a two-sided α of 0.05 (Z = 1.96) and 80% power (Z = 0.84), the minimum required sample was $(1.96 + 0.84)^2 / 0.5^2 = 31.4$, i.e. 32 participants. Allowing 20% for non-response and loss before post-test gave a minimum of 40 participants. Sixty girls were enrolled, exceeding this requirement; with the effect size actually observed (d = 2.82), the study had a statistical power above 99%.

Sampling technique

A non-probability convenience sampling technique was used. In each school, all girls aged 13–18 years who were present on the day of recruitment were approached, screened against the eligibility criteria and invited to participate until the required number was reached.

Data collection instrument and measurement of knowledge

A self-structured questionnaire was developed by the investigators after reviewing the OSC scheme guidelines and related literature. It had two sections:

- **Section A – socio-demographic data:** age, place of residence, type of family, religion and monthly family income.

- **Section B – knowledge questionnaire:** 30 multiple-choice questions covering the concept and forms of violence against women; the purpose, objectives and eligibility of the OSC programme; services available at the OSC (emergency response and rescue, medical aid, police facilitation, legal aid, psychosocial counselling and temporary shelter); how to reach the OSC, including the Women Helpline 181 and emergency number 112; and related women's rights and safety measures.

Each correct answer was awarded one mark and each incorrect or unanswered item zero, giving a total score of 0–30. Knowledge was categorised as inadequate (≤ 50%, score ≤ 15), moderate (51–75%, score 16–22) or adequate (> 75%, score ≥ 23). Content validity was established by five experts in nursing, community health and child health nursing, and the questionnaire was revised in line with their suggestions. Reliability was tested on 10 adolescent girls from a similar school who were not part of the main sample, using the split-half method with the Spearman–Brown correction (r = 0.82), indicating that the tool was reliable. The same questionnaire was used at pre-test and post-test.

Intervention: the awareness campaign

The awareness campaign was a structured, school-based health education session prepared by the investigators and approved by the research guide. Its content, delivery and timing were as follows:

- **Content:** meaning and types of violence against women and girls (physical, sexual, emotional, economic and online violence); its health and social consequences; introduction to the Sakhi OSC programme, its objectives and who can use it; services provided under one roof; how to access the OSC directly, through the Women Helpline 181, the police or the emergency number 112; confidentiality of services; and the role of girls in seeking help for themselves and others.

- **Delivery methods:** an interactive lecture–discussion supported by a PowerPoint presentation, charts and posters, a short role-play depicting how a girl in distress can reach the OSC, and a question-and-answer session. An information leaflet in Hindi was distributed at the end of the session.

Student's Journal of Health Research Africa
e-ISSN: 2709-9997, p-ISSN: 3006-1059
Vol.7 No. 3 (2026): September 2026 Issue
https://doi.org/10.51168/m5f2d336
Original Article

- **Facilitators:** the five B.Sc. Nursing student investigators, trained and supervised by the research guide (Professor, Child Health Nursing), who was present throughout the sessions.

- **Setting, number and duration of sessions:** one session of about 60 minutes held in a classroom of each school, in Hindi with English terms where needed, delivered to groups of about 30 girls.

- **Timing of the post-test:** the post-test was administered on the seventh day after the campaign using the same questionnaire under similar conditions.

- **Deviations:** the campaign was delivered as planned, with no changes in content, duration or facilitators, and no participant missed the session.

Data collection procedure

After obtaining permission from the school principals, the investigators explained the purpose of the study to the girls and distributed information sheets and consent forms for their parents or guardians. On the first day, eligible girls with signed consent completed Section A and the pre-test (Section B) in about 30 minutes under the supervision of the investigators. The awareness campaign followed, and the post-test was administered as described above. Completed questionnaires were checked for completeness on the spot.

Measures taken to minimise bias

- **Measurement bias:** a single standardised, validated questionnaire was used at both time points with identical instructions, time allowance and seating arrangements; the scoring key was fixed in advance and scoring was done by two investigators independently, with discrepancies resolved by the guide.

- **Response and social-desirability bias:** questionnaires were identified only by a code number, participants were assured that their answers would not affect school assessments, and teachers were not present in the room while questionnaires were completed.

- **Contamination and testing effects:** participants were asked not to discuss the questions with each other between the tests, the answers to the pre-test were not revealed, and no other education on the topic was given between the pre-test and post-test.

- **Intervention fidelity:** all sessions followed the same lesson plan and teaching aids and were supervised by the same guide.

- **Attrition bias:** the short interval between the tests was chosen to minimise loss of participants; all enrolled girls completed both tests.

Statistical methods

Data were coded, entered in Microsoft Excel and analysed using IBM SPSS Statistics version 26.0 (IBM Corp., Armonk, NY, USA). Socio-demographic characteristics and knowledge levels were summarised as frequencies and percentages, and knowledge scores as mean, standard deviation (SD) and mean percentage. Because the same participants were assessed twice, the difference between pre-test and post-test mean scores was tested with the paired t-test, and the mean difference was reported with its 95% confidence interval (CI); the effect size was expressed as Cohen's d for paired data (mean difference ÷ SD of the differences). The association between pre-test knowledge level and socio-demographic variables was assessed with the chi-square test, and Fisher's exact test was used where an expected cell frequency was less than five. All tests were two-tailed, and $p < 0.05$ was considered statistically significant.

Ethical considerations

The study protocol was approved by the Institutional Ethics Committee, Faculty of Nursing, Rama University, Kanpur. Written permission was obtained from the principals of both schools. The study was conducted in accordance with the principles of the Declaration of Helsinki and the Indian Council of Medical Research National Ethical Guidelines for Biomedical and Health Research Involving Human Participants (2017).

Informed consent

Because all participants were minors, written informed consent was obtained from a parent or guardian of each girl, and written assent was obtained from each participant after the purpose, procedure, voluntary nature and confidentiality of the study were explained in Hindi. Participants were told that they could withdraw at any time without any consequence. No personal identifiers were recorded on the questionnaires, and girls were given the Women Helpline (181) number and the address of the Kanpur OSC in case they or anyone they knew needed help.

Results

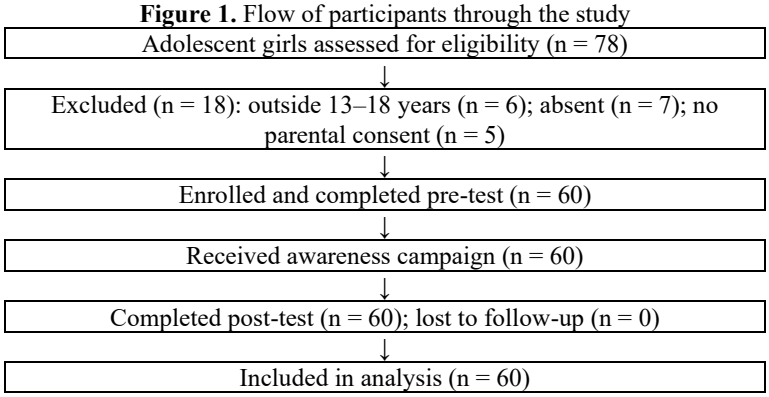
Participant flow

A total of 78 girls in the two schools were assessed for eligibility. Of these, 18 were excluded (6 were outside the 13–18-year age range, 7 were absent on the day of data collection and 5 did not return parental consent). Sixty

Student's Journal of Health Research Africa
e-ISSN: 2709-9997, p-ISSN: 3006-1059
Vol.7 No. 3 (2026): September 2026 Issue
https://doi.org/10.51168/m5f2d336
Original Article

eligible girls were enrolled (32 from Prabhat Public Senior Secondary School and 28 from Sardar Patel Intermediate College). All 60 attended the awareness campaign and completed the post-test; no participant dropped out, and all 60 were included in the analysis (Figure 1)

Figure 1. Flow of participants through the study



Socio-demographic characteristics

Table 1. Socio-demographic characteristics of the participants (n = 60)

Variable / category	Frequency (n)	Percentage (%)
Age (years)		
13–14	22	36.7
15–16	33	55.0
17–18	5	8.3
Place of residence		
Rural	31	51.7
Urban	29	48.3
Type of family		
Nuclear	39	65.0
Joint	21	35.0
Religion		
Hindu	59	98.3
Muslim	1	1.7
Christian / others	0	0.0
Monthly family income (Rs.)		
< 10,000	22	36.7
≥ 10,000	29	48.3
Did not know / not reported	9	15.0

Table 1 shows that more than half of the girls (55.0%) were aged 15–16 years, 36.7% were 13–14 years and 8.3% were 17–18 years. Slightly more girls lived in rural (51.7%) than urban (48.3%) areas, and nearly two-thirds (65.0%) belonged to nuclear families. Almost all participants were Hindu (98.3%). With regard to monthly family income, 48.3% of families earned Rs. 10,000 or more and 36.7% earned less than Rs. 10,000; 15.0% of the girls did not know or did not report their family income.

Student's Journal of Health Research Africa
e-ISSN: 2709-9997, p-ISSN: 3006-1059
Vol.7 No. 3 (2026): September 2026 Issue
https://doi.org/10.51168/m5f2d336
Original Article

Level of knowledge before and after the awareness campaign

Table 2. Distribution of participants by level of knowledge regarding the OSC programme at pre-test and post-test (n = 60)

Level of knowledge (score range)	Pre-test n	Pre-test %	Post-test n	Post-test %
Inadequate (≤ 15)	31	51.7	0	0.0
Moderate (16–22)	29	48.3	1	1.7
Adequate (≥ 23)	0	0.0	59	98.3
Total	60	100.0	60	100.0

Table 2 shows a clear shift in knowledge levels after the campaign. Before the intervention, just over half of the girls (51.7%) had inadequate knowledge, 48.3% had moderate knowledge and none had adequate knowledge. After the campaign, no girl had inadequate knowledge, 98.3% had adequate knowledge and only one girl (1.7%) remained at the moderate level.

Comparison of pre-test and post-test knowledge scores

Table 3. Mean, standard deviation and mean percentage of pre-test and post-test knowledge scores (n = 60)

Assessment	Mean score	SD	Mean percentage	Mean difference
Pre-test	15.15	4.53	50.5%	13.10 (43.7 percentage points)
Post-test	28.25	1.38	94.2%	—

Maximum possible score = 30. Mean percentage = mean score ÷ maximum possible score × 100.

Table 3 shows that the mean knowledge score rose from 15.15 (SD 4.53), or 50.5% of the maximum score, at pre-test to 28.25 (SD 1.38), or 94.2%, at post-test, a mean gain of 13.10 marks. The smaller SD at post-test shows that scores also became much more uniform after the campaign.

Effectiveness of the awareness campaign

Table 4. Paired t-test comparing pre-test and post-test knowledge scores (n = 60)

Mean difference	SD of difference	SE	95% CI of difference	t	df	p-value	Cohen's d
13.10	4.65	0.60	11.90 to 14.30	21.83	59	< 0.001	2.82

Critical value of t at df = 59 and p = 0.05 (two-tailed) = 2.00. SD of the difference, SE, 95% CI and Cohen's d were derived from the reported mean difference and t value.

Table 4 shows that the calculated t value (21.83) was far greater than the critical value (2.00) at 59 degrees of freedom ($p < 0.001$). The 95% CI of the mean gain (11.90–14.30) does not include zero, and the effect size (d = 2.82) is very large. The awareness campaign was therefore effective in improving knowledge regarding the OSC programme; H_{01} was rejected and H_1 was accepted

Association between pre-test knowledge and socio-demographic variables

Table 5. Association between pre-test level of knowledge and selected socio-demographic variables (n = 60)

Variable	χ^2 value	df	p-value	Inference
Age (years)	7.04	2	0.030	Significant
Place of residence	0.26	1	0.611	Not significant
Type of family	0.21	1	0.645	Not significant
Religion	Fisher's exact	—	1.000	Not significant
Monthly family income	0.59	1	0.443	Not significant

Student's Journal of Health Research Africa
e-ISSN: 2709-9997, p-ISSN: 3006-1059
Vol.7 No. 3 (2026): September 2026 Issue
https://doi.org/10.51168/m5f2d336
Original Article

Pre-test knowledge was dichotomised as inadequate or moderate because no participant had adequate knowledge at pre-test. Fisher's exact test was used for religion. Girls who did not report family income (n = 9) were excluded from the income analysis.

Table 5 shows that pre-test knowledge was significantly associated with age (χ^2 = 7.04, df = 2, p = 0.030); inadequate knowledge was more frequent among girls aged 13–14 years (16 of 22) than among those aged 15–16 years (14 of 33) or 17–18 years (1 of 5), whereas place of residence, type of family, religion and monthly family income were not significantly associated with pre-test knowledge. H_{02} was therefore rejected for age and retained for the other variables.

Discussion

Main findings

This study found that baseline knowledge of the OSC programme among school-going adolescent girls in Kanpur was low: more than half had inadequate knowledge and none had adequate knowledge. A single structured awareness campaign was followed by a large and statistically significant gain in knowledge, with the mean score rising by 13.10 marks and nearly all girls reaching the adequate category. Age was the only socio-demographic variable associated with baseline knowledge.

Interpretation and comparison with other studies

The low baseline knowledge is consistent with evidence that awareness of support services for survivors of violence is limited. Survivors using comparable one-stop crisis centres in Bangladesh described having little knowledge of the services before a crisis, and most reached the centres only through police or emergency referral [13]. In India, nationally representative surveys show that most women who experience violence either seek no help or turn only to their families, and that very few use formal services [9,10]. Lack of knowledge about services such as the OSC is likely to be one reason for this gap, which makes the low pre-test scores in our sample an important finding in its own right, given that Uttar Pradesh records the largest number of crimes against women in the country [5].

The improvement in knowledge after the campaign agrees with findings from other school-based programmes. The nationwide DHEERA programme, delivered to nearly 9,000 students of grades 9–12 across 26 Indian states, reported significant improvements in understanding of gender-based violence and, specifically, in knowledge of what actions to take and whom to approach [14]. A Cochrane review of 24 trials of school-based abuse-prevention education found that such programmes consistently improved knowledge (standardised mean difference 0.61) and that the gain persisted for up to six months, without increasing anxiety or fear among students [15]. The effect size in our study (d = 2.82) is considerably larger than the pooled effect in that review. This is likely to reflect the low starting level of knowledge, the factual and specific nature of the content (names of services, helpline numbers and access routes), the use of several interactive teaching methods, and the short interval between the campaign and the post-test. The absence of a control group may also have inflated the observed effect, because part of the gain could be due to familiarity with the questionnaire.

The marked reduction in the SD of scores at post-test indicates that the campaign benefited almost all girls, including those with the lowest baseline knowledge. This is relevant from an equity perspective, since adolescents from deprived backgrounds in Uttar Pradesh and Bihar carry a disproportionate burden of violence [8].

The higher proportion of inadequate knowledge among the youngest girls may be explained by greater exposure of older girls to media, school discussions and community information on women's safety. Ahankari and colleagues similarly found that knowledge and attitudes related to gender equality differed by age and sex among rural adolescents in Maharashtra [17]. The lack of association with residence, family type and income suggests that low awareness of the OSC programme cuts across social groups, so awareness activities should be offered to all girls rather than targeted to particular subgroups. The finding for religion should be interpreted cautiously, as almost all participants were Hindu. Because attitudes accepting violence are also common among adolescent boys in South Asia [16], future campaigns should include boys as well as girls.

Implications

The campaign was brief, inexpensive and delivered by nursing students under faculty supervision, which makes it feasible to scale up through school health programmes, Rashtriya Kishor Swasthya Karyakram activities, district OSCs and nursing and medical colleges. Linking knowledge of the OSC with practical access routes, such as the 181 helpline, may help shorten the time between experiencing violence and receiving help.

Generalizability

The external validity of these findings is limited. Participants were recruited by convenience sampling from only two schools in one city, almost all were Hindu, and girls not enrolled in school, who may be at higher risk of violence, were not included. The findings can therefore be generalised with reasonable confidence only to school-going adolescent girls in similar urban and peri-urban settings of Uttar Pradesh with comparable socio-

Student's Journal of Health Research Africa
e-ISSN: 2709-9997, p-ISSN: 3006-1059
Vol.7 No. 3 (2026): September 2026 Issue
https://doi.org/10.51168/m5f2d336
Original Article

demographic profiles. The magnitude of the effect may differ in rural or out-of-school populations, in other states with different OSC visibility, or where the campaign is delivered by personnel other than trained nursing students. Nevertheless, the consistency of our results with those of larger school-based programmes in India and elsewhere [14,15] suggests that the direction of the effect is likely to hold in other school settings.

Strengths and limitations

Strengths of the study include a clearly defined and fully described intervention, the use of a validated questionnaire at both time points, complete follow-up of all participants and reporting of confidence intervals and effect size. Its limitations include the one-group design without a control group, which cannot exclude testing effects, maturation or outside influences; convenience sampling and a modest sample from two schools; measurement of knowledge only, not attitudes, intentions or actual help-seeking; and assessment of knowledge only in the short term, so retention over time is unknown.

Conclusion

Knowledge regarding the One Stop Centre programme among adolescent girls in selected higher secondary schools of Kanpur was low before the intervention. The structured awareness campaign produced a large and statistically significant improvement in knowledge, with almost all girls achieving adequate knowledge afterwards. Baseline knowledge was associated with age but not with residence, family type, religion or family income. School-based awareness campaigns are a simple and effective means of informing adolescent girls about the support available to them in situations of violence.

Recommendations

- Awareness of the OSC programme, the Women Helpline 181 and the emergency number 112 should be included in school health education, life-skills sessions and adolescent health programmes, with periodic refresher sessions.
- District OSCs, schools and nursing institutions should collaborate to conduct regular outreach in schools, including visits to the OSC and display of service information within school premises.
- Similar studies should be conducted using a randomised or controlled design, larger and more diverse samples (including rural, out-of-school girls and boys), and longer follow-up to assess retention of knowledge, attitudes and actual help-seeking behaviour.

Acknowledgements

The authors thank the principals, teachers and staff of Prabhat Public Senior Secondary School and Sardar Patel Intermediate College, Kanpur, for permitting and facilitating the study; the adolescent girls and their parents for their participation and cooperation; the experts who reviewed and validated the study tool; and the Dean and faculty members of the Faculty of Nursing, Rama University, Kanpur, for their guidance and support.

List of abbreviations

Abbreviation	Full form
CI	Confidence interval
df	Degrees of freedom
ERSS	Emergency Response Support System (112)
H_0 / H_1	Null hypothesis / research hypothesis
NCRB	National Crime Records Bureau
NFHS	National Family Health Survey
OSC	One Stop Centre (Sakhi)
SD	Standard deviation
SE	Standard error
TREND	Transparent Reporting of Evaluations with Nonrandomized Designs
UDAYA	Understanding the Lives of Adolescents and Young Adults (survey)
U.P.	Uttar Pradesh
WHL	Women Helpline (181)
WHO	World Health Organization
χ^2	Chi-square

Student's Journal of Health Research Africa
e-ISSN: 2709-9997, p-ISSN: 3006-1059
Vol.7 No. 3 (2026): September 2026 Issue
https://doi.org/10.51168/m5f2d336
Original Article

Source of funding
This research did not receive any specific grant from funding agencies in the public, commercial or not-for-profit sectors. The cost of teaching materials and leaflets was borne by the investigators.

Conflict of interest
The authors declare that they have no conflicts of interest related to this study.

Author contributions
- **Alka Devi:** conceptualisation, review of literature, development of the questionnaire, data collection and writing of the original draft.
- **Anamika Biswas:** review of literature, preparation of teaching aids and delivery of the awareness campaign, data collection.
- **Angelin Anto:** development of the awareness campaign content and leaflet, delivery of the campaign, data collection.
- **Anju Kumari:** recruitment of participants, administration of pre-test and post-test, data entry and scoring.
- **Ankita Maddhesiya:** data management, statistical analysis, preparation of tables and figures.
- **Minu S. R.:** study design and methodology, validation of the tool, supervision of the intervention and data collection, interpretation of results, critical review and editing of the manuscript; corresponding author.

All authors read and approved the final manuscript and agree to be accountable for all aspects of the work.

Author biographies
Alka Devi, Anamika Biswas, Angelin Anto, Anju Kumari and Ankita Maddhesiya are undergraduate B.Sc. Nursing students at the Faculty of Nursing, Rama University, Kanpur, Uttar Pradesh, India. This study was conducted as part of their undergraduate nursing research project, and their interests include community health nursing, adolescent health and women's safety.

Dr. Minu S. R. (M.Sc. Nursing, Ph.D. Nursing) is Professor and Vice Principal in the Department of Child Health Nursing, Faculty of Nursing, Rama University, Kanpur, Uttar Pradesh, India. She has 15 years of experience in nursing education and research, and her areas of interest include child and adolescent health, school health and nursing education.

Data availability statement
The de-identified dataset generated and analysed during the current study is available from the corresponding author on reasonable request. The data are not publicly available because the participants are minors and consent was not obtained for public sharing.

References
1. World Health Organization. Adolescent health. Geneva: WHO; [cited 2026 Oct 28]. Available from: https://www.who.int/health-topics/adolescent-health
2. The Prevention Collaborative. Violence against adolescent girls. The Prevention Collaborative; [cited 2026 Oct 28]. Available from: https://prevention-collaborative.org/about-violence/violence-against-adolescent-girls
3. World Health Organization. Violence against women prevalence estimates, 2023: global, regional and national prevalence estimates for intimate partner violence against women and non-partner sexual violence against women. Geneva: WHO, on behalf of the United Nations Inter-Agency Working Group on Violence Against Women Estimation and Data; 2025. Available from: https://www.who.int/news/item/19-11-2025-lifetime-toll--840-million-women-faced-partner-or-sexual-violence
4. United Nations Office on Drugs and Crime, UN Women. Femicides in 2023: global estimates of intimate partner/family member femicides. Vienna and New York: UNODC and UN Women; 2024. Available from: https://www.unodc.org/unodc/en/press/releases/2024/November/one-woman-is-killed-every-10-minutes-by-their-intimate-partners-or-other-family-members.html
5. National Crime Records Bureau. Crime in India 2023: statistics. Vol. I. New Delhi: Ministry of Home Affairs, Government of India; 2025. Available from: https://www.ncrb.gov.in
6. Mishra SK, Pradhan G, Pradhan SK, Choubey G. Prevalence and predictors of domestic violence in India: complex sample analysis of a nationally representative study conducted between 2019 and 2021. Cureus. 2024;16(8):e66113. doi:10.7759/cureus.66113 https://doi.org/10.7759/cureus.66113
7. Kalokhe A, del Rio C, Dunkle K, Stephenson R, Metheny N, Paranjape A, et al. Domestic violence against women in India: a systematic review of a decade of quantitative studies. Glob Public Health. 2017;12(4):498-513. doi:10.1080/17441692.2015.1119293 https://doi.org/10.1080/17441692.2015.1119293
8. Bora JK, Saikia N, Jatrana S. Prevalence and risk factors of violence against adolescents: evidence from the two most populous and socio-economically disadvantaged states of India. Child Youth Serv Rev. 2025;179:108609. doi:10.1016/j.childyouth.2025.108609 https://doi.org/10.1016/j.childyouth.2025.108609
9. Ghoshal R, Patil P, Sinha I, Gadgil A, Nathani P, Jain N, et al. Factors associated with help-seeking by women facing intimate partner violence in

India: findings from National Family Health Survey-5 (2019-2021). BMC Glob Public Health. 2024;2(1):25. https://doi.org/10.1186/s44263-024-00056-3
10. Kanougiya S, Sivakami M, Daruwalla N, Osrin D. Prevalence, pattern, and predictors of formal help-seeking for intimate partner violence against women: findings from India's cross-sectional National Family Health Surveys-3 (2005-2006) and 4 (2015-2016). BMC Public Health. 2022;22(1):2386. https://doi.org/10.1186/s12889-022-14650-3
11. Ministry of Women and Child Development. Mission Shakti (Integrated Women Empowerment Programme): umbrella scheme for safety, security and empowerment of women - scheme implementation guidelines. New Delhi: Government of India; 2022. Available from: https://wcd.nic.in
12. Press Information Bureau. A total of 752 One Stop Centres operational in the country assisting 801062 women [Internet]. New Delhi: Ministry of Women and Child Development, Government of India; 2023 Dec 6 [cited 2026 Oct 28]. Available from: https://pib.gov.in/PressReleasePage.aspx?PRID=1983164
13. Moonajilin MS, Mubashshira S, Kamal MKI, Islam RU, Taher L, Taher T, et al. Survivor expectations and experiences of one-stop crisis centres in Bangladesh: a qualitative study of health system responsiveness to gender-based violence. Health Expect. 2026;29(2):e70643. doi:10.1111/hex.70643 https://doi.org/10.1111/hex.70643
14. Kumari SS, Suman BA, Kiranmai D, Bhardwaj A. DHEERA reaching the young, a novel approach addressing gender-based violence in India. Int J Gynaecol Obstet. 2023;163(2):367-76. doi:10.1002/ijgo.15120 https://doi.org/10.1002/ijgo.15120
15. Walsh K, Zwi K, Woolfenden S, Shlonsky A. School-based education programmes for the prevention of child sexual abuse. Cochrane Database Syst Rev. 2015;2015(4):CD004380. doi:10.1002/14651858.CD004380.pub3 https://doi.org/10.1002/14651858.CD004380.pub3
16. Dalal K, Lee MS, Gifford M. Male adolescents' attitudes toward wife beating: a multi-country study in South Asia. J Adolesc Health. 2012;50(5):437-42. doi:10.1016/j.jadohealth.2011.09.012 https://doi.org/10.1016/j.jadohealth.2011.09.012
17. Ahankari A, Ovseiko P, Kabra P, Giridhari S, Rayamane K, Whitfield C, et al. Knowledge, attitudes, and behaviours about gender equality: a cross-sectional survey of adolescents from rural India. F1000Res. 2022;11:1045. doi:10.12688/f1000research.124577.1 https://doi.org/10.12688/f1000research.124577.1
18. Charan J, Biswas T. How to calculate sample size for different study designs in medical research? Indian J Psychol Med. 2013;35(2):121-6. doi:10.4103/0253-7176.116232 https://doi.org/10.4103/0253-7176.116232

PUBLISHER

Student's Journal of Health Research (SJHR)
(ISSN 2709-9997) Online
(ISSN 3006-1059) Print
Category: Non-Governmental & Non-profit Organization
Email: studentsjournal2020@gmail.com
WhatsApp: +256 775 434 261
Location: Scholar's Summit Nakigalala, P. O. Box 701432, Entebbe Uganda, East Africa