

## Original Research Article

# Effectiveness of sexual and reproductive health training program on knowledge and coping strategies of women with mental illness: a true experimental study

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**Received:** 24 July 2026

**Revised:** 25 September 2026

**Accepted:** 26 September 2026

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## ABSTRACT

**Background:** Women with mental illnesses (WMI) experience significant problems with their reproductive health and feel uncomfortable discussing sexual functioning with medical professionals. Therefore, the study aims to investigate the efficacy of the sexual and reproductive health (SRH) training program on knowledge and coping strategies among WMI.

**Methods:** The study employed a true experimental design with a pretest-posttest control group. Individuals with SRH problems were selected using a simple random sampling technique from a random table for the experimental (n=65) and control (n=65) groups. The experimental group received the SRH training program, which included three interactive sessions using different teaching methodologies. While the control group received Information Education and Communication (IEC) material on SRH. A knowledge questionnaire about SRH and a Coping Checklist were used to gather data. SPSS version 22 for Windows was used to analyze the data.

**Results:** The study demonstrated the effectiveness of the SRH training program, as evidenced by differences in knowledge and coping strategy scores between experimental and control groups following the post-test ( $p < 0.05$ ). In the experimental group, a substantial positive correlation was found at the  $p < 0.05$  level between knowledge and problem-solving, distraction-negative, acceptance/redefinition, religion/faith, and denial/blame coping strategies.

**Conclusion:** The present study findings concluded that WMI benefit from the SRH training program in terms of improving their knowledge and coping mechanisms regarding the appropriate use of contraception, prevention of Sexually Transmitted Infections, sufficient information on sexual health, and appropriate referral services for sexual violence.

**Keywords:** Coping strategies, Knowledge, Reproductive health, Sexual health, Women with mental illness

## INTRODUCTION

Sexual and reproductive health (SRH) refers to comprehensive physical, mental, and social health in all domains of the reproductive system.<sup>1</sup> Women with mental

illness (WMI) are underprivileged due to their gender and the substantial reproductive health issues caused by their mental diseases.<sup>2</sup> The prevalence of SRH problems is 25-65% and this risk is exacerbated by the co-administration of psychoactive drugs.<sup>3</sup> They experience significant

health inequalities as compared to the general population such as: Increased rates of unwanted pregnancies, Decreased planned pregnancies and live birth rates, Unmet contraceptive needs, high number of partners, Risky sexual behaviour, Increased incidence of sexually transmitted infections (STIs), dysfunction in sexual relations, Increased rates of abuse and rape.<sup>2-6</sup>

Family planning (FP) is essential for every woman of childbearing age. However, still it is necessary for WMI since they carry a high risk of unintended pregnancy, having an abortion, sexual assault, poor birth outcomes, and not using their birth control due to mental illness.<sup>7</sup> The prevalence of STIs among WMI could be the outcome of several factors, including inadequate condom use, engaging in risky sexual behaviours, and lack of awareness or understanding of the associated risks.<sup>8,9</sup> The risk of contracting STIs is higher in WMI because they are more likely to become victims of sexual abuse and are less inclined to report their sexual behaviour.<sup>2</sup> It is observed that a very high incidence of Sexual dysfunction (SD) among women with psychiatric disorders, including schizophrenia (25-85%) and schizoaffective disorder, as well as bipolar disorder.<sup>10</sup> SD is highly prevalent (60-80%) among patients treated with antidepressants and typical antipsychotics (prolonged treatment and higher dosage of medications).<sup>11-13</sup> WMI frequently experience violence of all kinds (physical, emotional and sexual). Women with severe mental illness (SMI) had high sexual violence (SV). Research has revealed that one in three women who visit mental health services, both inpatient and outpatient, have experienced domestic violence, which includes SV.<sup>14</sup> Therefore, the likelihood of violence against psychiatric patient is 4-6 times higher than the general population.<sup>15,16</sup>

Women mental health support systems and coping strategies include strength through indigenous culture, connection to God and Christian faith, expression through the arts, and social support. This can be leveraged to create culturally relevant, strength-based, trauma-informed interventions that enhance coping and resilience among women with mental health issues.<sup>17</sup> WMI tend to use various coping techniques, including problem-solving, emotional relaxation, and avoidance, to adjust and accommodate their impairments.<sup>18</sup> It is thought that WMI who are treated with medication, psychotherapy, and positive coping techniques have a quicker healing process and can quickly achieve the best possible level of mental, emotional, and social well-being.<sup>19</sup>

SRH services are dissociated from mental health services provided, and as a result, often fail to screen the SRH problems of the WMI.<sup>20</sup> For women seeking mental health services to be provided with information regarding SRH is essential. Coping styles among WMI can have a significant impact on their adherence to SRH intervention and the progression of their disease through lifestyle changes.<sup>21</sup> Inability of the WMI to access SRH services is becoming more and more common. Structural inclusivity,

communication challenges, and negative perceptions by service providers are some of the reasons for this.<sup>22</sup> These issues may be addressed in clinical practice to enhance quality of life and sexual well-being.<sup>23</sup> Since WMI are a vulnerable population, most of the time, their SRH needs are unmet in mental health care setting. They are at higher risk of experiencing SRH problems but are unaware of the consequences. Though many pieces of evidence are available regarding the prevalence of SRH problems, no appropriate intervention is available in a mental health care setting. To address the concerns, a proper women-centered SRH intervention should be initiated with the assistance of mental health professionals. Therefore, the study aimed to investigate the efficacy of the Sexual and Reproductive Health (SRH) training program on knowledge and coping strategies among WMI.

## METHODS

### Design

A quantitative approach with true experimental research using a pre-test and post-test control group design was used.

### Study participants

The study target population are women diagnosed with mental illness (according to the International Classification of diseases (ICD)-10) and receiving mental health services at a tertiary care psychiatric center in Bengaluru, South India. The inclusion criteria include WMI who were married individual in the 18-49 age group and the duration of illness not less than one-year, Brief psychiatric rating scale (BPRS) score <18 (currently in remission), who scored between 24-30 (No cognitive impairment) on Mini-Mental Status Examination (MMSE) scale, able to communicate in English, Kannada, Tamil languages. WMI have the history of SRH issues such as sexual dysfunction, experiencing symptoms of STIs, problems in using contraception, and presence of sexual violence for the past 1 year were invited to participate. WMI (n=176) were identified to have SRH problems using reproductive health assessment toolkit - Family planning and sexually transmitted infection questionnaire, female sexual function index, violence against women instrument - sexual violence domain.

Initial dropouts were identified (n=26) for reasons such as, not willing (n=13), taking treatment outside (n=4), pregnancy (n=7), and developed symptoms (n=2). Remaining samples were assigned to experimental (n=65) and control groups (n=65) based on a computer-generated random number table.<sup>24</sup> Exclusion criteria include an intellectual disability as per clinical examination, hearing and speech disorder, Brief Psychiatric Rating Scale (BPRS) Score  $\geq 18$  (Symptomatic), not willing to participate in this study.

## Study tools

Data collection tools used are knowledge questionnaire on SRH and Kiran Rao coping check list (CCL). The knowledge questionnaire on SRH contains information about FP, STIs, sexual health and SV. It had 25 items with yes or no options. Each right answer received a score of one. The CCL has seven subscales were created apriori and verified in a sample of normal adults. There are five emotion-focused scales (distraction-positive: 14 items, distraction-negative: 9 items, acceptance/redefinition: 11 items, religion/faith: 9 items, denial/blame: 11 items), one problem-focused scale (problem-solving: 10 items), and social support, which combines problem and emotion-focused coping (6 items). There was a total of 70 items with yes or no options. Each correct answer received a score of one. The final score was 70.

Therefore, the total of the yes responses (rated as 1) on each subscale determines the score for that subscale.<sup>25</sup> Experts (n=9) who could offer their knowledge to the study were given the prepared SRH training program (various methods of FP, signs and symptoms, factors contributing to increased vulnerability of STI among WMI, sexual health responses and safe sexual health practices, risk factors and preventive measures of SV, problem and emotion-focused coping methods), knowledge questionnaire on SRH and CCL along with the problem statement, objectives, operational definitions, blueprint, and criterion rating scale created for validation.<sup>26</sup> Modification was done as per the suggestion from experts. The reliability testing of the knowledge questionnaire was 0.72 and the CCL was 0.84.

## Study procedure

The finalized questionnaire and the SRH training programme were piloted among twenty [Experimental (n=10) and control (n=10)] WMI and found that it was feasible to adapt to Indian settings. Permission was obtained from the Institute authorities. Data was collected in a private room in the follow-up outpatient department. The purpose of the study was explained to samples with the assurance of privacy and confidentiality, and their signature was then acquired on the consent form. Both groups completed a pre-test on the day of recruitment. The experimental group received the SRH training program, which was repeated at the end of the 1st and 2nd months during follow-up. A telephone call was made every 15 days to ensure the continuation of the intervention. While the control group received IEC (Information education and communication) material on SRH along with their routine treatment. Post-test was done for both groups after two months. Data collection was done from 12.05.22 to 09.05.23. Data were analysed by using descriptive and inferential statistics. The study was duly registered in Clinical Trail Registry- India before commencement (CTRI No-CTRI/2022/05/042362 Dated 04.05.2022)

## Statistical analysis

Data were entered in Excel and analyzed using IBM SPSS version 22 for Windows.<sup>27</sup> Descriptive statistics such as frequency, percentage, mean, standard deviation, median, and interquartile range were used to describe the sociodemographic variables. The homogeneity between the two study groups was evaluated using the Mann Whitney U test. Kolmogorov-Smirnov normality test was computed to determine the statistics to be used. The efficacy of the SRH training program on knowledge and coping strategies was calculated by Wilcoxon signed rank test. Correlation between posttest knowledge scores and coping strategies of SRH among WMI was calculated by Spearman rank correlation. Using the Man Whitney and Kruskal Wallis tests, the association between the pretest knowledge score, coping techniques and the chosen demographic characteristics of WMI was determined.

## RESULTS

### Demographic characteristics of study participants

The mean age (37.31, 36.94), years of education (10.05, 10.0), and the median income (3000, 3000) was same in both the groups. Most of them were home makers (46.15%, 49.23%), belongs to Hindu religion (76.92%, 81.54%), and they were from nuclear family (70.77%, 67.69%) in both the groups. Majority of WMI (83.08%, 86.15%) did not have the social habits like alcohol and tobacco.

### Clinical variables of study participants

Majority of WMI (72.31%, 73.85%) did not have the history of past medical illness. Among the participants who had mental illness in experimental group BPAD 35.38% > psychotic disorders and anxiety disorder 23.08% > depression 18.46% and in control group psychotic disorder 36.92% > BPAD 26.15% > depression and anxiety disorder 18.46%. There is no difference in the duration of illness (4 years) in both the groups.

### Marital details of study participants

There is no variation in the age at marriage (18 years) from both the groups. Majority of them had the history of childbirth (90.77%, 83.08%) and they had two children (38.5%, 40%) in both the groups.

### Comparison of pretest knowledge and coping strategies of SRH among WMI in the study groups

Comparison of the two study groups was done by Mann Whitney-U test reveals that, at baseline, there were no significant differences in the pretest knowledge and coping strategies of SRH between the experimental and control groups ( $p>0.05$ ), except for one-factor, religion/faith coping strategy ( $p=0.041$ ) (Table 1).

**Table 1: Comparison of pretest knowledge and coping strategies of SRH among WMI in the study groups (n=130).**

| Variables                                 | Study groups Median (Q1, Q3) |               | U value | P value |
|-------------------------------------------|------------------------------|---------------|---------|---------|
|                                           | Exp (n=65)                   | Con (n=65)    |         |         |
| <b>Knowledge</b>                          | 10 (8.5,11.0)                | 10 (9.0,11.0) | 2054    | 0.781   |
| <b>Problem-focused coping</b>             |                              |               |         |         |
| Problem-solving                           | 04 (3.0, 6.0)                | 05 (4.0, 6.0) | 1935.5  | 0.403   |
| <b>Emotion-focused coping</b>             |                              |               |         |         |
| Distraction positive                      | 05 (4.0, 7.0)                | 05 (3.5, 6.0) | 1939    | 0.414   |
| Distraction negative                      | 02 (1.0, 3.0)                | 02 (1.0, 3.0) | 2086    | 0.900   |
| Acceptance/Redefinition                   | 07 (6.0, 8.5)                | 07 (5.0, 8.0) | 1751.5  | 0.088   |
| Religion/Faith                            | 04 (3.0, 6.0)                | 03 (2.0, 4.5) | 1680    | 0.041*  |
| Denial/ Blame                             | 05 (4.0, 7.0)                | 05 (4.0, 7.0) | 1930.5  | 0.391   |
| <b>Problem and emotion-focused coping</b> |                              |               |         |         |
| Social support                            | 03 (2.0, 4.0)                | 03 (2.0, 4.0) | 1998.5  | 0.582   |

The data of the two groups are expressed as median (Q1, Q3). Knowledge was assessed using questionnaire, developed by the researcher and validated by experts (n=9). Minimum knowledge score - 0, Maximum knowledge score - 25. Coping strategies were assessed using standardised checklist (CCL) developed by Rao (2003)93, Minimum coping score - 0, Maximum coping score - 70. Abbreviations used: Exp-Experimental group: WMI received SRH training program, Con-Control group: WMI received IEC material on SRH along with their routine treatment, Statistical test used: Mann Whitney U test, level of significance: \*p<0.05 was considered significant, p>0.05 was considered non-significant.

**Table 2: Comparison of pre and posttest knowledge on SRH among WMI in the study groups (n=130).**

| Group      | Knowledge scores |                 | Z value | P value |
|------------|------------------|-----------------|---------|---------|
|            | Median (Q1, Q3)  |                 |         |         |
|            | Pre-test         | Post-test       |         |         |
| Exp (n=65) | 10 (8.5, 11.0)   | 19 (18.0,20.0)  | -7.03   | <0.001* |
| Con (n=65) | 10 (9.0, 11.0)   | 11 (10.0, 13.0) | -5.136  | <0.001* |

The data of the two groups are expressed as median (Q1, Q3), i.e., Knowledge score on SRH. Knowledge was assessed using questionnaire developed by the researcher and validated by experts (n=9), Minimum knowledge score - 0, Maximum knowledge score - 25. Abbreviations used: Exp-Experimental group: WMI received SRH training program, Con-Control group: WMI received IEC material on SRH along with their routine treatment. Statistical test used: Z - Wilcoxon signed rank test, level of significance: \*p<0.05 was considered significant.

**Table 3: Comparison of pretest and posttest scores of SRH coping strategies among WMI in the study groups (n=130).**

| Variables                                                | Study groups | Median(Q1, Q3) |                | Z value | P value |
|----------------------------------------------------------|--------------|----------------|----------------|---------|---------|
|                                                          |              | Pre-test       | Post-test      |         |         |
| <b>Problem-focused coping</b>                            | Exp(n=65)    | 04 (3.0, 6.0)  | 06 (4.5, 9.5)  | -5.261  | <0.001* |
| <b>Problem-solving</b>                                   | Con(n=65)    | 05 (4.0, 6.0)  | 05 (4.0, 6.0)  | 0.0     | 1.000   |
| <b>Emotion-focused coping</b>                            | Exp(n=65)    | 05 (4.0,7.0)   | 7 (5.0, 11.5)  | -5.416  | <0.001* |
| <b>Distraction positive</b>                              | Con(n=65)    | 05 (3.5, 6.0)  | 05 (4.0, 7.0)  | -0.147  | 0.883   |
| <b>Distraction negative</b>                              | Exp(n=65)    | 02 (1.0, 3.0)  | 0.0 (0, 0)     | -4.435  | <0.001* |
|                                                          | Con(n=65)    | 02 (1.0, 3.0)  | 02 (1.0, 3.0)  | -2.309  | 0.021*  |
| <b>Acceptance/ redefinition</b>                          | Exp(n=65)    | 07 (6.0, 8.5)  | 09 (7.0, 10.5) | -5.247  | <0.001* |
|                                                          | Con(n=65)    | 07 (5.0, 8.0)  | 07 (5.0, 8.0)  | -0.184  | 0.854   |
| <b>Religion/faith</b>                                    | Exp(n=65)    | 04 (3.0, 6.0)  | 06 (4.0, 8.0)  | -5.03   | <0.001* |
|                                                          | Con(n=65)    | 03 (2.0, 4.5)  | 03 (2.5, 5.0)  | -0.707  | 0.480   |
| <b>Denial/blame</b>                                      | Exp(n=65)    | 05 (4.0, 7.0)  | 0.0 (0.0, 1.0) | -6.135  | <0.001* |
|                                                          | Con(n=65)    | 05 (4.0, 7.0)  | 05 (4.5, 7.0)  | 0.0     | 1.000   |
| <b>Problem and emotion-focused coping social support</b> | Exp(n=65)    | 03 (2.0, 4.0)  | 04 (3.0, 5.0)  | -5.046  | <0.001* |
|                                                          | Con(n=65)    | 03 (2.0, 4.0)  | 03 (2.0, 4.0)  | -2.53   | 0.011*  |

The data of the two groups are expressed as median (Q1, Q3), i.e. Coping strategies on SRH. Coping strategies were assessed using standardised checklist (CCL) developed by Rao (2003)93, Minimum coping score:0, Maximum coping score:70. Abbreviations used: Exp-Experimental group: WMI received SRH training program. Con-Control group: WMI received IEC material on SRH along with their routine treatment. Statistical test used: Z - Wilcoxon signed rank test, level of significance: \*p<0.05 was considered significant, p>0.05 was considered non-significant.

**Table 4: Correlation between posttest knowledge score and coping strategies of SRH among WMI in the study groups (n=130).**

| Variables                                 | Knowledge score |         |            |         |
|-------------------------------------------|-----------------|---------|------------|---------|
|                                           | Exp (n=65)      |         | Con (n=65) |         |
|                                           | rho             | P value | rho        | P value |
| <b>Problem-focused coping</b>             |                 |         |            |         |
| Problem-solving                           | 0.28            | 0.024*  | 0.29       | 0.019*  |
| <b>Emotion-focused coping</b>             |                 |         |            |         |
| Distraction positive                      | 0.23            | 0.06    | 0.08       | 0.513   |
| Distraction negative                      | 0.25            | 0.049*  | 0.14       | 0.268   |
| Acceptance/Redefinition                   | 0.26            | 0.038*  | 0.19       | 0.135   |
| Religion/Faith                            | 0.29            | 0.021*  | 0.02       | 0.8     |
| Denial/Blame                              | 0.31            | 0.013*  | 0.09       | 0.489   |
| <b>Problem and emotion-focused coping</b> |                 |         |            |         |
| Social support                            | 0.19            | 0.121   | 0.26       | 0.035*  |

Knowledge was assessed using questionnaire developed by the researcher and validated by experts (n=9). Minimum knowledge score:0, Maximum knowledge score:25. Coping strategies were assessed using standardised checklist (CCL) developed by Rao (2003)93, Minimum coping score:0, Maximum coping score:70. Abbreviations used: Exp-Experimental group: WMI received SRH training program. Con-Control group: WMI received IEC material on SRH along with their routine treatment, statistical test used: rho - Spearman rank correlation, level of significance: \*p<0.05 was considered significant positive correlation.

#### ***Comparison of pre and post-test knowledge on SRH among WMI in the study groups***

Table 2 shows that there was a significant ( $p<0.05$ ) difference in the knowledge score of both the groups. The difference in the median of the experimental group was higher (10 to 19) than the control group (10 to 11). This suggests that, compared to the control group, the experimental group knowledge has improved because of the SRH training programme.

#### ***Comparison of pre and post-test coping strategies on SRH among WMI in the study groups***

The experimental group coping strategies differed significantly ( $p<0.05$ ) from those of the participating WMI, as Table 3 demonstrates. On the other hand, only the distraction negative and social support coping methods exhibit a significant difference ( $p<0.05$ ) in the control group. The experimental group result is much higher than the control group's when comparing the median.

#### ***Correlation between post-test knowledge score and coping strategies of SRH among WMI in the study groups***

Table 4 shows the significant correlation ( $p<0.05$ ) between knowledge and coping strategies of SRH among participating WMI. So, when the knowledge increases, they adopt better-coping strategies. The control group also found a significant correlation between knowledge and problem solving, social support coping strategies at  $p<0.05$  level.

## **DISCUSSION**

The study attempted to explore the effectiveness of SRH training program on knowledge and coping strategies of WMI. Information on SRH must be given to women who are seeking mental health services, and it is a part of standard medical care. However, WMI were vague about the requirements of SRH and had little knowledge of the field. The results of the present study indicate that there is no significant difference ( $p>0.05$ ) in the pretest knowledge scores and coping strategies of the study groups. It shows that at baseline both the groups were similar in their knowledge and their coping abilities. Findings of the present study was in line with Sheikh Miri et al, from Iran, which showed no discernible difference in the mean sexual function score and its characteristics between the case and control groups before treatment ( $p<0.001$ ).<sup>28</sup>

Healthcare providers, such as nurses, are in a prime position to identify SRH concerns in women early on and respond to them effectively. The current study sought to assess the knowledge and coping mechanisms among WMI gained via a researcher-developed SRH training programme. The results of the current study showed that the experimental group (10 to 19) differed significantly ( $p<0.05$ ) from the control group (10 to 11) in their knowledge scores from pre to post. This suggests a notable improvement in the experimental group knowledge scores. The findings of the present study that there is a significant ( $p<0.05$ ) difference in knowledge scores from pre to post in the experimental group (10 to 19) as compared to the control group (10 to 11). This indicates that knowledge scores in the experimental group showed a significant improvement. Sheikh Miri et al (2023), from Iran, conducted a study to find out how

cognitive-behavioural treatment affects sexual function in women with hypothyroidism who are of reproductive age. In comparison to the control group, the case group mean total score of sexual function and its dimensions increased significantly ( $p<0.001$ ) both immediately and four weeks following therapy.<sup>28</sup>

In the current study, there was a significant ( $p<0.05$ ) difference between the experimental and control groups in terms of the coping mechanisms (Problem-focused, emotion-focused, problem, and emotion- focused). Following the intervention, there were notable alterations noted in the experimental group coping methods, including problem-solving, distraction positive, acceptance/redefinition, religion/faith, and social support. Followed by denial/blame and distraction negative coping strategies were reduced after the intervention in the experimental group. Where as in the control group, there is a significant difference ( $p<0.05$ ) in distraction negative and social support coping strategies. This could be because the women in this group received IEC materials on SRH. The other coping strategies like problem solving, distraction positive, acceptance/redefinition, religion/faith, denial/blame coping strategies were the same from pre to post. A comparable study was carried out by Kaur et al, from Andhra Pradesh, India, problem solving (60.46%), acceptance/redefinition (64.72%), and social support (72.55%) were the most often utilized coping strategies by the sample.<sup>29</sup> Kulkarni et al, from Karnataka India, conducted a study to assess emotional intelligence and coping styles, in a group of medical interneers confirmed that healthy coping styles were more frequently used than unhealthy ones.<sup>30</sup> Interventions will, therefore, assist the women in identifying both healthy and unhealthy coping mechanisms. However, encouraging them to practice healthy coping mechanisms such as yoga/meditation, physical activity, asking for help from friends and family, evaluating and approaching situations realistically, and turning to acceptance and prayer can significantly lessen the psychological stress associated with SRH issues.

Women coping strategies can have a significant impact on their knowledge of SRH intervention. As knowledge of SRH advances, the WMI will modify appropriate coping methods. The likelihood of SRH problems arising again will be decreased as a result. The results of the current study indicate that, when comparing the experimental group of WMI to the control group, there is a substantial positive correlation ( $p<0.05$ ) between knowledge and coping techniques of SRH. This implies that the experimental group may adopt suitable coping mechanisms such as problem-solving, acceptance/redefinition, and religion/faith as their knowledge base grows. Distraction negative, denial/blame coping strategies also showed a significant correlation ( $p<0.05$ ) with knowledge scores; this indicates that WMI needs time to entirely avoid unhealthy behaviours since our intervention was only two months. While problem-solving, and social support coping

strategies of the control group did show a significant correlation ( $p<0.05$ ) with knowledge scores. This is probably because the women in this group received SRH-related IEC materials. Sapharina et al, from Tamil Nadu India, also reported a strong association between coping and patient relationships, social support, and occupation. They found a significant positive correlation ( $r=0.529$ ) between perceived stress and coping.<sup>31</sup> Further, Kulkarnai et al, from Karnataka India, also supported that there was a substantial positive correlation between emotional quotient and healthy coping methods and a negative correlation with dysfunctional coping styles.<sup>30</sup>

### **Strength and limitations**

This is the first study of its kind to test the effectiveness of the SRH training programme on knowledge and coping strategies of WMI. The study's strengths include using the standardised assessment instruments, pilot testing prior to real recruiting, and one-on-one interviews with no time restrictions on exploring SRH issues. When they were recruited into the study, all WMI were asymptomatic, showing that mental illness in and of itself was not a barrier to expression. The sample size formula was used to determine an appropriate sample size. Meeting the subjects during follow-up at 2-time points ensured the motivation to identify and respond to SRH problems among WMI. Further it provided an opportunity to observe and discuss the gained knowledge and coping strategies by the subjects. The present study has some limitations includes, WMI enrolled in tertiary care psychiatric outpatient clinics, there is limited generalizability of the results. FP, STIs, sexual health, and sexual assault were not investigated in isolation from any other psychiatric disorder. The researcher did not investigate relationship between SD and psychiatric drugs.

The SRH training programme was restricted to women who are having problems using contraception, and experiencing symptoms of STIs, SD, and SV from a single setting. The results should, therefore, be interpreted cautiously as they may not reflect the experience of the larger population of WMI. Self-report bias, as an assessment of all outcome variables in this study, depended on self-report measures. Knowledge may vary about the management of SRH problems among WMI; to what extent the subjects translate this knowledge into practice is uncertain.

### **CONCLUSION**

SRH training program is an effective, inexpensive intervention that nurses can initiate to provide support and assistance to WMI who are facing SRH problems. Which includes information on various FP methods, promotion of sexual health, prevention of STIs, SV, and appropriate coping strategies. A significant ( $p<0.05$ ) improvement in WMI knowledge and coping strategies was observed following the SRH training programme,

indicating its effectiveness. WMI should have the freedom to discuss their sexual desires and make their own decisions, supported by their families and the healthcare system. Women will be urged to use suitable forms of contraception in places for mental health services to promote their sexual health and stop the spread of STIs and sexual assault. The findings show that this study can be a foundation for additional research and interventions in other healthcare settings.

## ACKNOWLEDGEMENTS

The authors acknowledge all the participants for sharing their personal experiences and valuable contributions to the completion of this study.

*Funding: No funding sources*

*Conflict of interest: None declared*

*Ethical approval: The study was approved by the Institutional Ethics Committee*

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**Cite this article as:** Vijayalakshmi S, Govindan R, Ganjekar S, Prathyusha PV, Kathyayani BV. Effectiveness of sexual and reproductive health training program on knowledge and coping strategies of women with mental illness: a true experimental study. *Int J Community Med Public Health* 2026;13:5927-34.