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Effectiveness Assessment Research Study on the customised outputs developed for Imparting Comprehensive Sexuality Education to Poorest of the Poor Blind Girls and Women from Developing Countries

Under the aegis of the 'Stars in Global Health Award 2019' Grant for the Innovation:

Creating Access to Comprehensive Sexuality Education for Poorest of the Poor Blind Girls and Women from Developing Countries

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About the Action-Research Project:

This research study was conducted under the aegis of the action-research project 'Creating Access to Comprehensive Sexuality Education (CSE) for Poorest of the Poor Blind Girls and Women from Developing Countries'. The action-research project focuses on the extremely marginalised but hitherto neglected populations of bind girls & women from the poor sections. Lack of comprehensive sexuality education for blind girls & women makes them highly vulnerable. This vulnerability resulting into sexual violence & exploitation increases multi-fold for those in poverty. The non-poor can afford to have some kind of protective mechanism but the blind girls from the poorest sections cannot afford such measures. Moreover their parents do not have much awareness about the issue and they have poor educational status constrains uptake of developmental messages. In addition, there is lack of understanding about this issue & related resources among the concerned stakeholders - government health services, blind girls' schools, and NGOs.

There are 2.4 million blind girls & women in India, especially 0.52 million of them in poverty, who hardly have any access to comprehensive sexuality education. Despite being the most vulnerable & large in numbers, the issue of provision & use of comprehensive sexuality education for blind girls & women from the poor sections of the society in India and Low and Middle Income Countries (LMICs) has been hitherto neglected. This is despite the fact that these girls & women are highly vulnerable to Sexual & Gender Based Violence (SGBV). A global study from UNFPA reveals that girls and young women with disabilities face up to 10 times more gender-based violence than those without disabilities. The SDGs on Gender Equality & Health cannot be attained without addressing this issue.

As a result, there is lack of globally replicable, accessible & affordable: customized pedagogy & curriculum, audio & tactile training aids & prototype training modules.

This global innovation will transform the sexual & reproductive health sector by centre-staging & addressing the issue for the first time in the context of differently abled while engaging all concerned stakeholders.

Project Objective: Enable access to comprehensive Sexual and Reproductive Health and Rights (SRHR) education to blind adolescent girls and women in Maharashtra State of India by developing and customizing curriculum, pedagogy, audio & tactile training aids.

Poorest of the poor blind girls & women in LMICs despite being vulnerable to sexual & gender based violence and not having access to CSE, there are no related research studies. This primary research aims to provide insights into the key associated factors.

Context / Background:

Based on the findings from primary research study on 'Status of Access to Comprehensive Sexuality Education (CSE) for Poorest of the Poor Blind Girls and Women from Developing Countries', customized outputs (i.e. teaching-learning aids) were developed for imparting CSE to blind girls & women. The customized outputs include- (1) customized curriculum & pedagogy, (2) audio, tactile training aids, (3) prototype training modules, (4) IEC Material & Posters.

These outputs were then pilot tested with multiple-stakeholders which included- adolescent blind girls and blind women, their parents (specifically mothers) and teachers/ facilitators/ educators working with the adolescent blind girls and blind women.

For pilot testing of the outputs, the effectiveness assessment research study was conducted with the primary stakeholders- the blind girl & women & other stakeholders such as parents (specifically mothers) and teachers/ trainers/ educators to assess the effectiveness of the outputs developed for imparting CSE to blind girls and women.

Modified/ Alternate Methodology in view of on field challenges emerging due to COVID-19 Pandemic: Proposed by the project team and approved by the GCC

Of the 3 major stages of the project, 2 stages of: 1) Research and 2) Developing customizing outputs were completed prior to COVID-19. The COVID-19 pandemic struck India while the third stage of Pilot testing and finalizing the outputs was initiated. The third stage of pilot testing was pivoted to the engagement with blind girls' schools which were closed in light of COVID-19. Thus, the continuation of the original proposed project strategy was facing severe challenges emerging from the COVID-19 pandemic as the original methodology for further steps was highly dependent on re-opening of the blind girls schools for further progress. In view of rising cases of COVID-19 there was un-certainty over re-opening of schools.

Considering the uncertainty over re-opening of the blind girls' schools, AIILSG proposed an alternate methodology for enabling the stage of pilot testing. Alternate methodology proposed of piloting through home visits with at least 10 blind girls, 10 mothers of blind girls and 5 teachers from blind girls' schools.

The alternate methodology was approved by the Grand Challenges Canada.

Research Design:

Research Aim & Objectives:

Research Aim:

To assess effectiveness of the outputs developed for imparting Comprehensive Sexuality Education (CSE), to adolescent blind girls & blind women, from the perspectives of primary stakeholders & other stakeholders.

Research Questions:

With respect to adolescent blind girls & women-

- 1. How the primary stakeholders & other stakeholders perceive the effectiveness of the outputs (teaching-learning aids) developed by the project for imparting CSE?
- 2. Do they have any feedback for improving effectiveness of the outputs developed?

Research Objectives:

- 1. To assess / understand effectiveness of the outputs (teaching-learning aids) developed for imparting CSE to blind adolescent girls & women, from the perspectives of primary stakeholders & other stakeholders. The primary stakeholders are adolescent blind girls & blind women and other stakeholders include parents (specifically mothers) of adolescent blind girls & blind women and teachers/ facilitators/ educators working with the adolescent blind girls & blind women.
- 2. To understand scope for improving improving effectiveness of the outputs developed.

Research Methodology:

The primary research adopted a qualitative research methodology to assess effectiveness of the outputs developed by the project for imparting CSE to adolescent blind girls & blind women.

The research participants included primary stakeholders who are adolescent blind girls & blind women and other stakeholders which included their mothers and teachers/ facilitators/ educators working with the adolescent blind girls & women.

During the effectiveness assessment research, training-cum-pilot testing of the outputs was undertaken with the research participants. Training (including demonstration of the outputs) by the project team which was followed by research participants individually & firsthand pilottesting/using the outputs under observation of the project team.

To assess effectiveness of the outputs, insight into perspectives of the concerned stakeholders (research participants) was gained using qualitative research method/s of- (a) discussions (semi-structured interviews) to understand their perspectives (b) written feedback from the research participants after training-cum-pilot testing of the outputs.

Ethical Considerations:

As the action research project involves blind adolescent girls & blind women, due ethical considerations were adhered to, relevant informed consent for voluntary participation were taken prior to conducting the pilot testing & discussions/ interviews. Research study participation was voluntary, and the participants were informed that they could withdraw from the study at any time.

Sample Size:

The research participants were selected as purposive samples to conduct training-cum-pilot testing & effectiveness assessment research.

The expected minimum sample size as per the modified methodology approved by the GCC was: 10 blind adolescent girls & blind women, 10 mothers of blind girls & women and 5 teachers from blind girls' schools.

The actual number of participants of the study were 47 which included: 25 adolescent blind girls & blind women (as primary stakeholders), 10 mothers of blind girls & women and 12 teachers/ facilitators/ educators from blind girls' schools (as other stakeholders).

Limitation:

As stated earlier due to the challenges emerging from COVID-19 the original research design had to be modified with the approval of GCC. Thus the modified methodology is the second best option.

Another limitation is that it focuses on one of the two genders. Similar action research with blind boys and men is earmarked as an important future direction.

Primary Research Findings & Observations:

This section outlines the primary findings and observations resulted from assessing effectiveness of the outputs from research participants' perspectives.

Effectiveness from the Perspective of Teachers/ Facilitators/ Educators

The interview responses were analysed to look for major themes and patterns across responses when answering each research question. After analysing the interview responses the following major themes were derived, where agreement was evident by the research participants. The results are presented in order of the research questions.

Current Methods of Imparting CSE and Limitations Faced:

- Few participants stated that they are conducting sexuality education but these efforts are more focused on menstruation related aspects, changes that happen during puberty/adolescence and explaining female body anatomy.
- It was shared by majority of the participants that they use conventional teaching method of reading through text books for imparting CSE to the blind girls. Some participants revealed that they have attempted conducting discussions (one-on-one or in group) to initiate discussion on menstruation related aspects. However, it had its own limitations as it was a challenge to explain the related anatomical & physiological aspects through verbal communication.
- All the participants stated that conventional teaching methods used with sighted persons i.e. pictures in books / videos are of no use for imparting CSE to the blind girls & women. It was also expressed that merely describing the images verbally is not enough for blind girls & women to understand the anatomy of human body, specifically reproductive organs, male and female genitalia. Hence, the blind girls have greater difficulty in understanding & synthesising information on sexuality (sexuality education) due to inadequate simulation or data perception.

'There are limitations to verbal explanation of sexuality & related aspects. For example in absence of appropriate models it is difficult to explain how male and female bodies are different. Furthermore through verbal explanation the blinds may understand the physiological process but still may not be able to comprehend/differentiate between anatomical aspects'. — A Respondent

• When explored about other modes of teaching, i.e. using 2-dimensional pictures/ drawings with raised lines/ markings for explaining female anatomy it was shared that, it is not adequate from the perspective of blinds as many times they are unable to accurately interpret it by solely using sense of touch (i.e. using their fingers to examine the raised lines) as the different raised lines/ markings (tactile graphics) would overlap each other making the line-drawing unreadable. It was further expressed that

interpreting 3-dimensional objects represented in 2-dimensional drawings is difficult especially for the blinds as 3-D to 2-D representation is a completely visual concept that does not lend itself to interpretation by touch.

'It is difficult to teach blind girls about female body anatomy, specifically reproductive organs in absence of any teaching-learning aids from blindness perspective.' — A Respondent

- When explored about the existing teaching-learning resources for imparting CSE, they expressed that they do not have access to any customised teaching-learning resources/ training aids, curriculum & training material to conduct CSE sessions for the blind girls.
- Another challenge faced was many a times girls felt shy and reluctant and do not ask
 questions. The socio-cultural taboo associated with sexuality related aspects, and
 conservative gender norms where girls are not supposed to ask questions needs to be
 addressed before delivering CSE as expressed by majority of the participants.
- The participants felt that some self-study through resource material/learning aids for individual use and ice-breaker exercises will be immensely valuable for girls to open up about the topic of CSE.

'If girls have some learning material (e.g. content in audio, 3-D model, braille book etc.) which they can refer in the privacy of their homes/hostels then it may help them to overcome their fear & reluctance during classroom sessions on CSE'. – A Respondent

- When explored about the existing knowledge resources & prior training received for imparting CSE, all the participant teachers/ facilitators/ educators shared that they had not received any training to conduct CSE sessions prior to this training-cum-pilot testing.
- The participants also recognised the need for specially designed teaching-learnings aids for delivering CSE from blindness perspective.

Effectiveness of the Outputs Developed for Imparting CSE: Perception of Teachers/ Facilitators/ Educators

- All the participant teachers/ facilitators/ educators shared that they had not used the similar outputs of 'audio-tactile training aid' (i.e. life size three-dimensional female body model linked with audio curriculum) before for imparting CSE to adolescent blind girls & women.
- All the participant teachers/ facilitators/ educators stated that they found the training & outputs of 'audio-tactile training aid' effective for imparting overall Comprehensive Sexuality Education (CSE) as currently there is hardly any availability & access to teaching- learning resources especially 3-dimensional models for imparting CSE from the perspective of blindness.
- Regarding existing/ current/ conventional knowledge resources for delivering CSE to the blind girls & women, all participants were in favour of 'audio-tactile training aid

(i.e. 3-D tactile model with audio content), audio curriculum in comparison to braille handbooks and textbook reading.

• It was reiterated by all the participants that the audio-tactile training aids (life size model of a woman linked with audio) will be helpful for the blind girls and women to understand better as teaching through text books and through classroom discussions has its own limitation as blind girls find it difficult to perceive in absence of any model.

'The three dimensional audio-tactile model (training aid) developed is the first of its kind that I have ever used. This will be helpful for teaching and for learning by blind girls enabling them to understand better'. – A Respondent

'Similar teaching-learning resources are needed at schools & institutions for blind girls & blind women to equip them with the necessary knowledge.' -A Respondent

• It was also shared that to teach about other sexuality related aspects like explaining good touch & bad touch, sexual exploitation, pre-marital counselling to adolescent blind girls & blind women etc. the audio-tactile training aids will be very effective.

'The blind girls and women are highly vulnerable to sexual exploitation. Also lack of sexuality education makes them easy targets for the perpetrators who are often known men/boys/persons to these girls & women. However use of such 'audio-tactile training aids' will help educate these girls & women and counsel them to raise alarm if faced with any adverse situation'. —A Respondent

Also, all the participants stated that the customised curriculum and training content
developed in audio will be useful for imparting CSE education to the blind girls and
women who either do not know & understand braille or have limited skills in that
regard. Thus considering those blind girls & women who are 'out-of-schools/
institutions', these tools can be of immense importance.

'Girls may feel shy and may not ask questions if the CSE sessions are conducted by the school teachers. But if these sessions are recorded and given to the girls which they can listen to in their privacy then the girls may feel more comfortable.' – A Respondent

- During interviews, some participants felt that it is important to impart CSE but they struggle with 'what to be shared' and 'how much to be shared' which is an age appropriate content. Hence, they found CSE curriculum / training content in audio very helpful.
- It was also shared by the participants that the schools and teachers will also benefit from the curriculum and training modules developed as this will help them to overcome the awkwardness of 'how to talk about the sexuality related aspects in age-appropriate manner'.
- All the participants expressed that the training and demonstration including pilot testing (first hand use/ hands on use) of the audio-tactile training aids by the participants was useful. The participants expressed that similar intensive efforts are needed to strengthen capacities of all teachers in delivering CSE from blindness perspective.

All the participants found the audio-tactile training aids is easy to use & simple to operate. They pilot-tested it (hand on use) with their eyes closed to understand ease or difficulty in using it from the perspective of blinds. They found it effective in explaining the female body anatomy including reproductive & genital organs through touch, which is a primary sensory communication for blind girls & women. They particularly found audio linked with touch highly effective as the blind girls will be able to relate better when they learn through sensory touch with the related audio running parallel.

Recommendations and Suggestions vis-à-vis the Outputs:

- The need for intensive training was highlighted in most interviews. It was specifically emphasised to conduct capacity building of the teachers/ facilitators/ educators/ trainers (working with schools, institutions & NGOs associated with the blind girls & women) in delivering CSE from blindness perspective.
- Moreover, many participants shared the need for training in using teaching-learning aids to impart CSE to blind girls & women.

'Only providing knowledge resources is not sufficient but along with it providing training to use these knowledge resources is important'. -A Respondent

- It was observed that the teachers/ facilitators/ educators lack knowledge to impart CSE in an age-appropriate manner. Moreover they lack skills to deliver it from the differently-abled/blindness perspective. Therefore teachers' capacity building is important with the training approach to impart not only the concepts of CSE but also pedagogic skills, and initiate cultural & behavioural changes about sexuality.
- Many participants expressed during interviews that developing/ designing simple to use audio-tactile teaching learning aids that can be given to all blind girls for use will be more effective. This will allow girls to learn & understand at their own pace in their privacy in addition to classroom teaching learning which is time-bound. Also, considering the socio-cultural taboo associated with discussions on sexuality also inhibits girls to ask questions during classroom sessions.
- The participants suggested there is need for easily available and simple to use teaching learning aids that the Schools/ Institutions for the Blind Girls & Women can purchase.
- It was expressed by some participants (facilitators/ trainers associated with NGOs) that customized tools for imparting CSE are also needed for other types of differently abled such as speech and hearing challenged.

Other Suggestions:

- It was shared during interviews that the parents have a very important role in instilling positive body image & self-esteem in their blind children (girls.) They also need to share basics of sexuality education with their blind children in an age-appropriate manner as the blind girls are highly vulnerable to abuse from an early age.
- Fearing/ concerning about parents' reaction towards schools/ institutions for imparting
 CSE to students, some participants expressed that parents should also take more
 responsibility for educating/ sharing information on sexuality related aspects. They felt
 that in case of girls, their mothers can play a crucial role in making their daughters
 comfortable and address their queries. Hence, sensitisation & training to mothers also
 needs to be considered.

'In addition to schools, the parents to also take responsibility of initiating the discussion on sexuality with their children in age-appropriate manner. The schools can consider organising sensitisation & training sessions for parents as well as their adolescent children'. – A Respondent

Effectiveness from the Perspective of Adolescent Blind Girls & Blind Women

This section elucidates primary findings from the semi-structured interviews and feedback from the adolescent blind girls & blind women post training-cum-pilot testing of the outputs developed. The central focus of the interview questions was to understand how the participants perceive the effectiveness of the outputs developed for imparting Comprehensive Sexuality Education (CSE).

Effectiveness of the Outputs Developed for Imparting CSE: Perception of Adolescent Girls & Blind Women

- All the participant adolescent blind girls & blind women shared that they had not earlier used similar outputs of 'audio-tactile training aid' (i.e. life size three-dimensional female body model linked with audio curriculum) for receiving CSE.
- All the participant adolescent blind girls & women stated that they found the training & outputs of 'audio-tactile training aid' effective for receiving CSE.
- Regarding the teaching-learning resources for delivering CSE to blinds, most responses were in favour of 3-D tactile model linked with audio content, audio curriculum in comparison to braille handbooks and textbook reading.
- All the participants found the audio-tactile training aids easy to use & simple to operate. They found it effective in explaining the female body anatomy including reproductive & genital organs through touch, which is their primary sensory communication. They particularly found audio linked with touch highly effective as they are able to relate better when they learn through sensory touch with the related audio running parallel.

'The 3-D model gave me better understanding about female body anatomy including reproductive organs'. -A Respondent

 $^{\prime}I$ am able to relate and understand more clearly through the 3-D model of female body'. – A Respondent

- Many participants responded that they do not know braille and hence found audiotactile training aids (3-D model) effective for receiving CSE. This also highlights the effectiveness of the current outputs (3-D model tactile model with audio, CSE curriculum in audio) for delivering CSE to the blind women and girls who do not know braille, and even to those who have not got any opportunity of education.
- All the participants stated that they need access to CSE audio-tactile training aids for individual use.
- Many participants also expressed that they will prefer to learn through 'self-study' in privacy of their homes/ hostels as they fear being ridiculed / appearing shameless for asking sexuality related questions in a class room setting. Hence, will prefer to have

CSE learning aids/ training aids for individual use. (This indicates the socio-cultural taboo associated with the discussions on sexuality related aspects and conservatives socio-cultural gender norms of girls behaving in a demure way and not asking questions).

Recommendations and Suggestions vis-à-vis the Outputs:

- The participant responses revealed the preference for individual learning aids/resources that they can use in their privacy to gain knowledge on sexuality (CSE).
- The participants suggested to receive more intensive training in using these outputs.

Effectiveness from the Perspective of Mothers

This section elucidates primary findings from the semi-structured interviews and feedback from the mothers of the adolescent blind girls & blind women post training-cum-pilot testing of the outputs developed. The central focus of the interview questions was to understand how the participants perceive the effectiveness of the outputs developed for imparting Comprehensive Sexuality Education (CSE).

Effectiveness of the Outputs Developed for Imparting CSE: Perception of Adolescent Girls & Blind Women

- All the participant mothers shared that they had not earlier used & nor were aware of similar outputs of 'audio-tactile training aid' (i.e. life size three-dimensional female body model linked with audio curriculum) for gaining knowledge on sexuality (CSE).
- All the participant mothers shared that they found the training & outputs of 'audiotactile training aid' effective for gaining knowledge on CSE.
- The participants found the 3-D tactile model & audio medium will be highly effective in imparting CSE to the blind girls & women.

Recommendations and Suggestions vis-à-vis the Outputs:

• Most of the participant mothers had poor educational status or were illiterate. Many of them also come from under-privileged sections and therefore they hardly had any prior exposure & opportunity to gain knowledge on CSE and access related knowledge resources. Hence, there were no specific suggestions from the participant mothers' visà-vis the outputs.

Other Suggestions:

- Many participant mothers expressed that the schools should take more responsibility towards imparting CSE to the adolescent girls.
- Some participant mothers stated the need for sensitization of parents and wider community to enable access of CSE to blind girls. This came in light of blind girls being far more susceptible to abuse & exploitation from a very young age. Moreover as it happens for many disadvantaged, both the parents are away from home for work for most part of the day. This increases vulnerability of the blind girls staying back alone at home.
- The interview responses from some participant mothers stated the need for making CSE knowledge resources available for blind girls & women in 'out of school' settings.
- The responses from participants also included- the NGOs to conduct the CSE sessions in their community so that those blind girls & women who are unable to attend schools can also get this information.

Conclusions & Recommendations:

The key findings from the effective assessment research are-

- The participants found the training & outputs of 'audio-tactile training aids' effective for imparting & receiving CSE.
- Many participants responded that they do not know braille and hence found audiotactile training aids (3-D model) effective for receiving CSE. This also highlights the effectiveness of the current outputs (3-D model tactile model with audio, CSE curriculum in audio) for delivering CSE to the blind women and girls who do not know braille, and even to those who have not got any opportunity of education.
- Considering that the blind girls & women from under-privileged and disadvantaged sections may not have access to education (through Schools/institutions/ through learning resources etc.), there is a need for making CSE knowledge resources available for blind girls & women in 'out of school' settings and 'community based' settings.
- The participants found the audio-tactile training aid (i.e. life size three-dimensional female body model linked with audio curriculum) to be highly effective in imparting CSE from the perspective of blind girls & women.
- The need for similar customized tools for imparting CSE is also highlighted for other types of differently abled such as speech and hearing challenged.

The key suggestions from the research participants on the outputs include-

- Need for a simple to use teaching-learning aid for 'individual use' by adolescent blind girls & women. The learning aid for individual use can be used as ice-breaker prior to a facilitated session by a facilitator/ trainer/ teacher.
- Need for intensive training to the concerned stakeholders (potential users) in using the outputs (audio-tactile training aids) to impart CSE to adolescent blind girls & women.

On basis of the suggestions received from the research participants, the researchers' recommendations are-

- Developing a soft toy doll (replica of adolescent girl) fitted with an audio that runs the commentary/ narration on CSE. Designing the doll in a manner that is simple to use and easy to operate by the blind girls & women independently. This doll to be named 'Khushi' meaning spreading happiness in lives of blind girls & women.
- Wherever possible, efforts need to be made to have maximum possible elements of such a doll manufactured by blind / visually impaired girls & women.

Annexures:

<u>Photo of Audio-Tactile Model 'Khushi':</u> Life Size Three Dimensional Tactile Model fitted with Touch Based Sensors linked with Audio Commentary





<u>Photo of Audio-Tactile Model 'Khushi': Soft Toy Doll with Audio for Individual Use by Blind Girls</u>

