Development and Evaluation of a Disability-Inclusive Training Program about Couples' Relationships and Sexual and Reproductive Health and Rights for Young Adults in Jordan: A Design Thinking Approach

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Abstract

Background: While Jordan has enacted progressive disability rights legislation, gaps persist in sexual and reproductive health and rights (SRHR) education. National data shows 68.5% of youth lack basic reproductive health information, with even lower awareness among youth with disabilities, with people with disabilities representing 11.2% of Jordan's population aged five years and above.

Objectives: This study aimed to develop and evaluate the effectiveness of a disability-inclusive training program about couples' relationships and SRHR, for young adults (18-30 years) with disabilities in Jordan, with the goal of paving the way for an officially endorsed educational program ready for wider dissemination in Jordan.

Methods: Aligning with the principle of "Nothing about us without us", this experiential research includes participants in the design process, ensuring user-centered outcomes. Researchers conducted focus groups (n = 42) and expert interviews (n = 3) to assess needs. A prototype training program was developed and tested through online workshops with small gender-segregated cohorts, including participants with and without disabilities. Evaluation used the Kirkpatrick Model, measuring satisfaction, knowledge, and attitudinal change.

Results: Following the course delivery, analysis showed statistically significant improvements in Rights Awareness (p = .032), Sexual Health (p = .004), and Reproductive Health (p = .005). The integrated disability approach proved effective. Qualitative data showed increased empowerment and validated the framework of connecting SRHR to healthy relationships, within the Jordanian context.

Conclusion: The study demonstrated the effectiveness of a culturally appropriate, disability-inclusive training program about couples' relationships and SRHR in Jordan, presenting a replicable model that emphasizes participatory approaches. Future iterations can better support the evolution of social mindsets through a widened application of Social Behavior Change Communication (SBCC) framework.

Keywords: disability inclusion, sexual and reproductive health and rights, design thinking, Jordan, health education, participatory research, training program development, healthy relationships.

Introduction

The Convention on the Rights of Persons with Disabilities (CRPD) establishes fundamental principles concerning sexual and reproductive health and rights (SRHR), emphasizing individual autonomy and the freedom to make independent choices (Article 3). The Convention delineates comprehensive protections encompassing respect for home and family life (Article 23), health (Article 25), privacy (Article 22), access to information (Article 21), and education (Article 24). These provisions align with the World Health Organization's holistic conceptualization of sexual and reproductive health, which transcends mere absence of illness to encompass complete physical, psychological, mental, and social wellbeing (WHO, 2018).

Jordan's position as a regional pioneer in disability rights legislation, marked by early CRPD ratification translated into local legislation in 2017, contrasts with persistent implementation gaps. Contemporary survey data reveal substantial deficiencies in SRHR knowledge among Jordanian youth, with 68.5% reporting no exposure to reproductive health education. This knowledge deficit is particularly pronounced among youth with disabilities, who represent 11.2% of Jordan's population aged five years and above. (UNFPA Jordan, 2024; PKF ProGroup, 2017).

The magnitude of this knowledge gap manifests across multiple domains: merely 8.1% of youth demonstrate awareness of sexually transmitted infections, while only 13.5% comprehend adolescent health issues. Among those who have received SRHR information, understanding remains circumscribed, with 93.2% conceptualizing it solely within the framework of family planning, while just 15.8% associate it with fertility issues, and a mere 8.9% recognize its relevance to menopause (UNFPA Jordan, 2024).

Analysis of current educational pathways reveals problematic patterns in SRHR information acquisition. Quantitative data indicates that 64.5% of youth rely on schoolteachers, as primary information sources, while 47.4% consult mothers and only 19.5% seek guidance from fathers. These patterns exhibit significant gender stratification: 34.9% of males receive paternal guidance compared to 3.2% of females, while 85.9% of females consult mothers versus 14.4% of males (UNFPA Jordan, 2024). Among individuals with disabilities specifically, research indicates that 70.4% depend on family members and informal social networks rather than healthcare professionals for reproductive health information (Damra & Hamarsheh, 2024). This predominant reliance on informal information channels perpetuates knowledge gaps and reinforces existing misconceptions.

The implementation of disability-inclusive SRHR services and education encounters multiple systemic barriers. Primary among these is the persistence of restrictive sociocultural mindsets, wherein sexuality remains a taboo subject and SRHR initiatives frequently encounter resistance from conservative societal strata. Institutional impediments create interconnected barriers throughout both educational and healthcare systems. Indeed while healthcare-sector data reveals that 69% of facilities report capacity to serve individuals with locomotive disabilities, while 65% possess adequate resources to address the needs of those with hearing impairments, and 64% report being able to support those with visual impairment (PKF ProGroup, 2017), it is worth noting that not all healthcare facilities are equally equipped to offer SRHR services for people with disabilities. In particular, results from the PFK ProGroup (2017) identified that these services are mostly available in the middle governorates of Jordan, while they are scarcer or absent in some governorates in the north and south regions. This limited institutional capacity is further exacerbated by deficiencies in health education and healthcare provider training protocols whereby 94% lack adequate training in disability-inclusive communication and service provision (PFK ProGroup, 2017).

Access to SRHR services and information is further constrained by multifaceted barriers including social stigmatization, status diminution, personal inhibition, provider unreliability, inadequate facility privacy, and inaccessible information formats (Hameed et al., 2020). Geographic analysis by Damra and Hamarsheh (2024) indicates that physical accessibility barriers disproportionately affect rural populations, while urban centers struggle with capacity limitations in providing disability-inclusive services.

Despite these persistent challenges, Jordan has achieved notable progress in enhancing healthcare and educational access for individuals with disabilities. The National Strategy for Health Sector in Jordan (2016-2020) explicitly prioritized disability inclusion, facilitating the establishment of specialized units within major hospitals and the progressive implementation of accessibility standards. Concurrently, the Ministry of Education’s National Strategy for Inclusive Education (2020-2030) has initiated systematic transformation of both physical infrastructure and pedagogical methodologies to better accommodate students with disabilities.

To address remaining deficiencies, the National Strategy for Reproductive and Sexual Health 2020-2030 (HPC, 2020) establishes a comprehensive framework for improvement. This framework emphasizes the development of innovative communication tools for SRHR information dissemination, particularly targeting persons with disabilities, and the implementation of specialized awareness programs for vulnerable populations “that cover the health of [youth] … with content and style commensurate with the social and religious culture prevailing in society” (HPC & SN-JO, 2022). The present study aims to address these identified gaps through the design, implementation, and evaluation of a disability-inclusive SRHR training program targeting young adults (18-30 years old) through participatory methodologies, with potential for broader national dissemination. Its ultimate objective is to support young adults with disabilities in Jordan in accessing their SRH rights. This latter statement can be identified as the initial “design challenge” – see figure 1 below for more information.

Design Thinking: A Disability-Inclusive and Human-Centered Approach

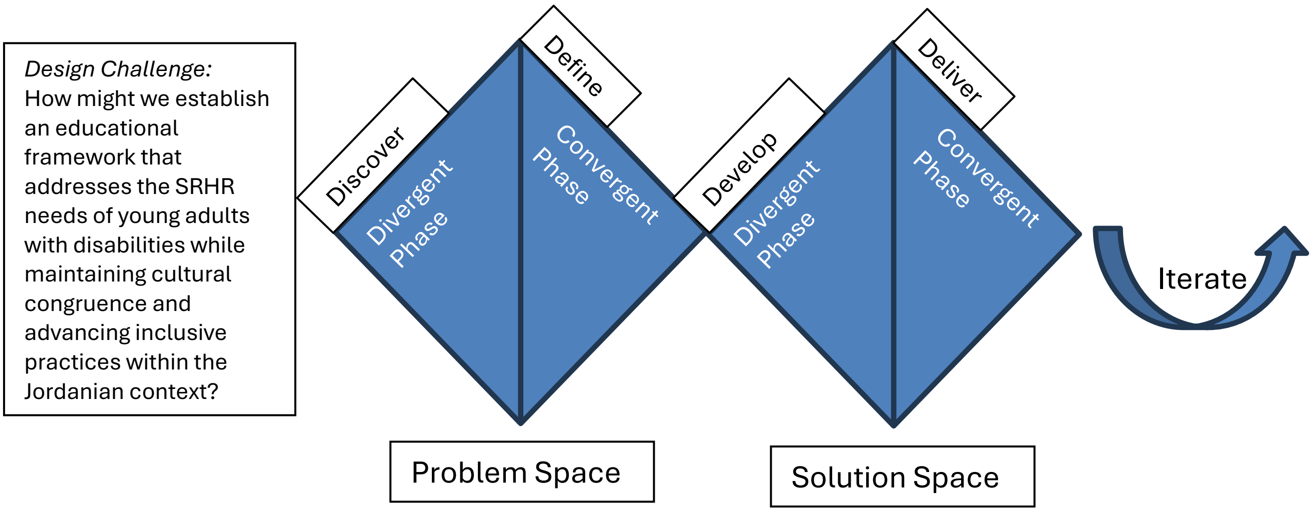
This experiential research was conducted from May through November 2024. Across its implementation, it employed design thinking methodology to develop and evaluate a training program addressing couples' relationships and sexual and reproductive health and rights (SRHR) for young adults with disabilities in Jordan. Design Thinking is a human-centered approach to creating innovative solutions based on a collaborative method that stimulates collective intelligence. Practically, choosing design-thinking as a methodology implied the need to involve people with disabilities across the whole process, collecting and integrating their needs and experiences from design to implementation. This methodological choice aligns with the fundamental principle of disability rights advocacy— "Nothing about us without us"—while facilitating the development of practical solutions that are evidence-based.

Figure 1 below displays the "Double-Diamond" of "Design Thinking" constituted of four phases, two constituting the "Problem Space" and two others constituting the "Solution Space". The problem space integrates a divergent phase called "Discover" where the experiences of targeted users are collected followed with a convergent phase called "Define", that synthesizes users' perspectives. The solution space reproduces as well as a divergent phase, followed by a convergent one, respectively called "Develop" and "Deliver". The "Double Diamond" departs from an initial challenge that will be further re-defined during the process. The design challenge of the experiential research reflects its objective, formulated earlier – i.e. "How might we establish an educational framework that addresses the SRHR needs of young adults with disabilities while maintaining cultural congruence and advancing inclusive practices within the Jordanian context?"

This experiential research is thus divided into two complementary sub-studies. The first of which concerns the Problem Space and feeds the design of the second, which represents the Solution Space of the Double Diamond and where the ultimate outcome of the research becomes visible.

Table 1 identifies the methods used for each phase and their outcomes, described further in the "findings" section.

Figure 1. The Double-Diamond of Design Thinking, described in the preceding text



Stakeholder Engagement Process

The experiential research study incorporated three distinct levels of stakeholder participation in training program design, implementation, and evaluation:

First, the study established a foundational partnership between the Ecumenical Disability Advocates Network (EDAN) and “I Am Human Society for Rights of People with Disabilities” (IAHRPD). IAHRPD, a local Organization of People with Disabilities (DPO). Within this partnership, IAHRPD facilitated target population access and stakeholder coordination, while EDAN provided methodological oversight and analytical expertise.

Second, researchers convened a six-member steering committee, including two members with disabilities (visual and motor impairments, respectively). The committee’s composition reflected intentional gender diversity, with five female members. Operating under formally validated Terms of Reference, the committee provided ongoing guidance throughout the research process.

Third, the study directly engaged young adults with disabilities throughout the process, as further detailed across the different phases of design thinking.

The methods and results of each phase are summarized within Table 1 below, before sharing further details of each in the following sections.

Table 1. Distribution of the four phases of design thinking across the double-diamond

"Nothing about us, without us" – embedding disability-inclusion and human-centered principles in research design:

- Involvement of young adults with disabilities across the process, with at least 50% representation of people with disabilities, and of females across the process.
- Partnership with I Am Human Society for Rights of People with Disabilities" (IAHRPD) OPD.
- Context-sensitive approach: iterative process referring to a committee of six Jordanian SRHR experts, with representation of people with disabilities.

THE PROBLEM SPACE

	Phase 1: Discover	Phase 2: Define
Definitions	• Divergent part of the "Problem space"; this phase involves exploring participants' needs via immersive observation and interaction.	• Convergent part of the problem space; this phase focuses on synthesizing research to articulate the core problem statement.
Objectives	• This phase aims to capture, through different means, the lived experience of young adults with disability in Jordan, in the areas of marriageability and SRHR and consider the perspectives of involved stakeholders. • In our experiential research, in addition to people with disabilities, we reached health workers, an educator/trainer and Organizations of People with Disabilities (OPDs). • Referring to design thinking terminology, this phase can also be called "Empathy".	• The "Define" phase synthesizes the results from the "Empathy" phase and revisits the initial problem statement or "design challenge" with the steering committee, with the aim of integrating the perspectives of people with disabilities.
Methods	• Focus Group Protocol • Expert Interview Protocol • Topics Checklist Development	• Data Analysis Protocol
Outcomes	The "Discover" phase produced an "Empathy Report", consolidating the following findings: • Participants Demographics • Overview of Focus Group Discussion Results • Expert Interview Findings	Main outcomes of the "Define" phase are: • A "User Journey" that identified barriers or "Pains" and supportive factors or "Gains", in three areas that affect young adults with disabilities experience in SRHR: (1) access to education and information, (2) access to a healthy relational life, and (3) access to SRHR services delivery • Problem re-definition, or the re-formulation of the "initial challenge" in a way that is meaningful for young adults with disabilities in Jordan.

THE SOLUTION SPACE

	Phase 3: Develop	Phase 4: Deliver
Definitions	• Divergent part of the “Solution Space”; this phase concentrates on issuing jointly with targeted solution users a multitude of solutions and building tangible versions of potential solutions for testing, called “Prototype” in Design Thinking. Prototypes bring concepts to life and evaluate their feasibility before investing considerable time and resources into full-scale production.	• Convergent part of the “Solution Space”; this phase centers on testing solutions with users to refine and improve features, in preparation of future iterations that meet better participants needs and expectations.
Objectives	• Based on the “Empathy” findings, this phase aims to develop the comprehensive training program along with implementation framework (attendance size and groups distribution; facilitation method, etc.) and a developed draft of the actual course in the form of a twelve-hour online workshop.	• “Testing” constitutes running the online workshops with two groups of people with disabilities and capturing their feedback, as a mean to test the prototype; preparing for more refined versions.
Methods	• Training Content Development Approach • Workshop Design Considerations • The Evaluation Framework	• Workshop Implementation Framework.
Outcomes	• The drafted “prototype” of the training program (see Appendix 2)	Applying the “evaluation framework pre-set in the “develop” phase, the results of the “Deliver” phase were analyzed under the following aspects: • Implementation cohort analysis • Quantitative assessment for satisfaction (Level 1) • Quantitative assessment for learning (Level 2) • Quantitative assessment for evolution in attitudes (Level 3) • Qualitative assessment of evolution in attitudes (Level 3)

Methods for Problem Space

Phase 1: Discover (Empathize)

Focus Group Protocol

Researchers conducted five focus group discussions with 42 total participants, all among people with disabilities, stratified by gender and marital status, with representation of people from regions outside Amman. The female cohort comprised two groups (married and single), while the male cohort included three groups (two single, one married). The married male group underwent two iterations to ensure adequate representation. Discussions followed a semi-structured protocol exploring four primary domains through fourteen standardized questions, concluding with systematic topics checklist validation. The four primary domains were: (1) Access to Information and Education about Marriage and Sexual and Reproductive Health (2) Autonomy of Decision-Making and Choice (3) Challenges Faced by Young Adults with Disabilities in Jordan around Relationships and Sexuality and resources available (4) Expected Outcomes and Topics of Interest.

Expert Interview Protocol

The experiential research included three in-depth expert interviews, selecting participants for complementary expertise: two healthcare practitioners experienced with disability-inclusive care (from Al-Karak and Amman) and one SRHR trainer-educator. Interviews followed a semi-structured protocol, lasting 60-90 minutes, conducted via online platforms. The interview guide incorporated themes identified through literature review and preliminary focus group analysis.

Topics Checklist Development

Researchers modified an initially conceived standalone survey instrument to function as a structured discussion tool during focus groups, following steering committee recommendations. The final instrument encompassed 32 topics across three domains: healthy relationships, sexual health, and reproductive health. Systematic review of the checklist concluded each focus group session, providing structured validation of topics relevance.

Phase 2: Define

Data Analysis Protocol

Analysis followed a structured thematic approach examining four primary domains: information access and education, decision-making autonomy, challenges encountered by young adults with disabilities, and program outcome expectations. Two EDAN researchers conducted all focus groups and expert interviews, with discrete facilitation and documentation roles.

The analytical process employed systematic coding and thematic classification using an iteratively developed framework. Multiple data source integration enabled effective triangulation of findings. Expert interview data underwent separate initial analysis before integration with focus group findings to provide professional context and validation.

Results for Problem Space

Phase 1: Discover (Empathy)

Participant Demographics

The initial focus group phase engaged 42 participants representing diverse disability types and geographic locations. Within this cohort, 32 participants reported different physical impairments, 7 reported visual impairments, and 3 reported hearing impairments. Geographic distribution achieved a deliberate balance between Amman (*n* = 17) and other governorates (*n* = 25, including 15 from Irbid, 6 from Ajloun, and others from Jerash, Karak, and Tafila).

Educational attainment varied significantly among participants: 17 had completed secondary education, 13 held university degrees, two reported incomplete secondary education, and 11 did not specify their educational level. Regarding economic independence, 15 participants reported employment with financial autonomy.

Focus Group Discussion Results

Analysis of focus group discussions yielded 200 distinct statements, with 163 (81.5%) addressing participant experiences regarding information access (67 statements), decision-making autonomy (14 statements), and other challenges specific to people with disabilities and resources (82 statements). The remaining 37 statements (18,5%) provided specific feedback regarding course expectations and design considerations. The 163 statements describing participants' experiences can be summarized in the journey described below and within Appendix 1, displaying themes and sub-themes, with additional examples of participants statements.

Societal Taboos as a Major Barrier to Access SRHR Information. The journey of individuals with disabilities seeking sexual and reproductive health and rights (SRHR) information and services in Jordan reveals a complex landscape shaped by deeply rooted societal attitudes, institutional barriers, and personal challenges. When attempting to access SRHR-related information, these individuals frequently encounter systematic taboos (20 occurrences), which emerged as the most significant barrier. These taboos permeate multiple layers of society, from family units to healthcare institutions. As one participant poignantly expressed, "At 14 years of age, I used to ask my father.... He used to tell me, 'When you grow up, you will know better." "This pattern of avoidance and deflection characterizes many family interactions around SRHR topics.

The impact of these taboos becomes particularly evident in the way individuals seek information, with informal sources (e.g. family, friends and social media, 25 occurrences) significantly outweighing formal channels (e.g. healthcare providers, educational institutions, and religious leaders, 12 occurrences). Family members, despite sometimes perpetuating misinformation, remain a primary source of information. However, this reliance on informal sources creates its own challenges, as illustrated by one participant's experience: "We referred to our parents, which sometimes provides us with helpful information and sometimes not."

Mitigated Experiences in Terms of Decision-Making Autonomy. The struggle for autonomy in SRHR-related decisions presents another significant challenge, with eight documented instances of behaviors limiting autonomy compared to five instances supporting it. Traditional practices, particularly in marriage decisions, continue to exert strong influence. As one participant noted, "Most of us contracted a traditional marriage, where parents choose the bride." However, signs of change are emerging, as evidenced by another participant's experience: "For me, there is a lot of acceptance, if from my side, I am convinced of the person. As a family, they have the right to confirm, but I decide, at the end."

Impact of Prejudice and Social Barriers on Access to SRH Service Provision. The intersection of disability and SRHR creates unique challenges that extend beyond general societal taboos. Prejudice and social barriers emerged as the most prevalent challenge (21 occurrences), manifesting particularly strongly in healthcare settings. Healthcare providers, who should serve as reliable sources of information and support, sometimes perpetuate prejudices by questioning individuals' capabilities. One participant shared, "Society and even some health care providers question our ability to take care of our children. It is not the technical ability to have children but much more the ability to care for them."

Internalized Barriers and Other Challenges. These external challenges often transform into internalized barriers (10 occurrences), as individuals absorb societal prejudices and develop self-doubt. One participant articulated this internalization starkly: "It is difficult to find someone who would accept you. For this reason, we keep a safe distance from other people. If we have difficulties talking about it between ourselves, how to talk about it with others...."

Disability-related vulnerabilities (10 occurrences) add another layer of complexity, encompassing concerns about financial autonomy (4 occurrences), health issues (3 occurrences), and impacts on family relationships (3 occurrences). As one participant explained, "Having acquired my disability over 10 years ago still affects me, in my sexual life and in other aspects." These practical challenges interweave with broader socio-cultural barriers, creating a complex web of obstacles.

Emerging Patterns of Evolving Social Mindsets. However, amidst these challenges, signs of positive change are emerging. Some individuals report developing supportive relationships that facilitate open dialogue about SRHR. As one participant shared, "My partner and I were very honest in this topic (the privacy of our sexual relationship), especially that it was my first experience in marriage. As both of us were advanced in age and have a motor disability, communication was easy." This kind of experience, though not yet widespread, demonstrates the possibility of breaking through societal taboos and establishing more open, supportive relationships.

These experiences collectively paint a picture of a community in transition, where traditional barriers persist but are gradually being challenged by changing attitudes and emerging support systems. The journey toward fully inclusive SRHR services and information remains ongoing, marked by both persistent challenges and promising developments in societal understanding and acceptance.

Integrating the above findings with the feedback of focus group discussion participants and of experts, we also reached to set key orientations for course design, as described below.

Expert Interview Findings

Across the process, output from expert interviews was crossed with feedback from people with disabilities. Experts' feedback meets and confirms the feedback of people with disabilities, in several aspects:

In terms of the taboo aspect of SRHR, expert feedback confirmed the prevalence of taboos surrounding SRHR as a major barrier in society, even more for people with disabilities. They also highlighted the necessity to advocate for reliable and accessible SRHR education as a must to protect youth and people with disabilities, who may otherwise run risks of abuse. Experts also clarified how taboo and barrier to SRHR information mutually reinforce each other.

Experts confirmed the relevance of educating parents in SRH, as key for more open and safe access to RH education; parents and family being a main source for informal SRHR education. Educating them may support more autonomy in decision-making for youth, particularly those with disabilities; parents and family interference in this area being strongly marked.

Experts confirmed the need to introduce in the course the relational dimension of SRHR, supporting people with disabilities in nurturing sustainable and mutually fulfilling marriages. This was found particularly relevant given the interference of parents in SRH decision-making, including the choice of marrying or not and whom to marry, often leading to detrimental results for people with disabilities.

Experts equally confirmed the relevance of tackling decision-making freedom in reproductive health, and that people with disabilities are equally qualified to have children, if they want.

Other aspects that were better highlighted through expert feedback, based on their practice with people with disabilities, were:

Prioritizing topics related to prevention and protection from sexual violence and abuse. Within a context where taboo is prevalent, experts highlighted risks of abuse linked to lack of information and awareness.

In terms of sexual health, tackling prejudice is linked to the possibility of access to pleasure along with orientation on how to adapt the sexual activity for people with different impairments.
The relevance of designing a course that addresses the specific needs and challenges of people with disabilities, while remaining relevant for the general population. As per experts, disability-specific aspects include addressing prejudice towards people with disabilities in SRH; mixing attendants with disabilities with attendants without disabilities and varying communication means to include people with different impairments (e.g., consider sign-language interpretation).

Other recommendations from experts included customizing course content for the male group (e.g., more sensitive to issues related to virility) Vs the female group (e.g. more interested in body image); departing from participants' personal experiences and include human rights advocates in priority targets

Phase 2: Define

Identified Barriers and the "User Journey"

Integration of focus group and expert interview data led to a refined understanding of the core challenges or "pains" facing young adults with disabilities in accessing SRHR education and services as well as supportive factors or "Gains" available. Those could be summarized within a "user journey" (*) related to three domains, affecting their relational and sexual and reproductive health life. Those are "Access to Information and Education", "Access to a Healthy Relational Life", and "Access to SRH Services Delivery". Results are presented in Table 2 below.
(*) In design thinking, a user journey refers to the step-by-step experience that a user goes through when interacting with a product, service, or system. It's a way of mapping out a user's emotions, thoughts, and actions across touchpoints to identify pain points, opportunities, and areas for improvement.

Table 2. Journey of Young Adults with Disabilities in Jordan, as related to couple relationships and SRHR

Category	Access to SRHR Information and Education	Access to a Healthy Relational Life	Access to SRHR Services
PAINS	• Strong taboo around SRHR (20 occurrences reported), particularly stronger for males (83% vs. 56% for females). ○ Reliance on unreliable information sources including pornography. ○ Social stigma and fear of judgment preventing open discussion and access to SRHR information • Family (especially parents) acts as the main barrier to accessing valid information. • Absence of formal SRHR education in schools. • Limited disability-inclusive knowledge among health professionals. • Lack of adapted communication means (braille, sign language).	• Social prejudices question the right to marriage and sexuality for people with disabilities. • Barriers to marriage between disabled/non-disabled people. • Prejudices about genetic transmission. • Shame associated with disability affecting relationships. • Low self-esteem and internalized stigma affecting relationships. • Fear about parenting capabilities. • Limited relationship autonomy due to family interference in marriage and relationship decisions.	• Lack of confidentiality in some healthcare centers. • Limited access to specialized services in rural areas. • Healthcare provider biases regarding disability, including prejudiced attitudes about marriage and sexuality for people with disabilities. • Lack of disability-inclusive competence among healthcare providers. • Communication barriers in healthcare settings. • Cost barriers for some services (e.g., IVF) (and people with disabilities experiencing financial challenges).
GAINS	• Growing societal acceptance of SRHR as natural part of life, leading to increased openness toward SRHR education. • Support and guidance from community resources, including families and religious leaders. • Access to online resources and information. • Availability of some specialized training for people with disabilities. • Medical professionals offering reliable information.	• Some examples of supportive parental attitudes. • Successful relationships between partners with disabilities. • Open communication and mutual understanding between partners with disabilities. • Peer support among people with disabilities in finding partners. • Growing self-acceptance and confidence. • Some positive changes in societal attitudes.	• Access to quality SRHR services through private sector and military healthcare systems. • People with disabilities have good experiences with some gynecologists. • Some healthcare providers offer professional treatment. • Availability of medical insurance coverage for some.

Problem Redefinition

Based on the above, adopting a human-centered approach to problem definition, the initial "design challenge" could be re-formulated as follows: "How might we empower young adults (18-30 years) with disabilities in Jordan to achieve more fully their rights in the domain of couples' relationships and sexual and reproductive health rights while favoring a supportive social environment?"

Methods for Solution Space

Phase 3: Develop (Prototype)

The Empathy results outlined above initiated within the "Discover" phase yielded significant insights that inform both training content development and implementation framework applying to an online workshop. These insights can be categorized into two primary areas: Training program content approach and workshop design considerations, including implementation strategies. Those considerations derived first from young adults with disabilities and experts feedback and were afterwards validated and, where relevant, completed through the steering committee.

Training Program Content Development Approach

The training content development process integrated findings from the Discover and Define phases, distributing topics under five major clusters: (1) rights-based approaches to SRHR; (2) relationship to self; (3) healthy dynamics within couples' relationships; (4) sexual health fundamentals; and (5) reproductive health foundations. Within each cluster, learning objectives, content outline, activities proposed during each session and follow-up assignments were defined. Development followed an iterative process, with regular steering committee review and refinement. Content development prioritized cultural appropriateness while maintaining comprehensive coverage of essential SRHR topics.

Workshop design considerations

Group composition emerged as a key factor, requiring gender-separated discussion groups while integrating participants with and without disabilities to foster inclusive dialogue. Groups were kept small (12-15 participants) to ensure meaningful participation.

For instance, given cultural sensitivity, safety and comfort considerations were paramount, necessitating clear boundaries between SRH education and personal choices, participant involvement in defining safety conditions, and content framing within local cultural norms while maintaining rights-based approaches.

The educational approach prioritized experiential learning over purely theoretical content, incorporating gamification elements and facilitating small group discussions without facilitator presence, which participants identified as contributing to psychological safety during the workshop.

Accessibility considerations included multiple format options for materials, ensuring online platform accessibility, and proactively addressing communication barriers through measures such as oral description of visuals for participants with visual impairments and screen reader-compatible materials. For sessions including participants with hearing impairments, pre-session coordination with sign language interpreters for terminology was essential.

These orientations reflect the complex interplay between disability inclusion, cultural sensitivity, and effective SRHR education, as revealed through the empathy research process. They provide a foundation for developing training content and implementation approaches that respond directly to the needs and experiences of people with disabilities in Jordan.

Evaluation Framework

The experiential research employed the Kirkpatrick evaluation model, a recognized framework for assessing training program effectiveness across four hierarchical levels: reaction, learning, attitude, and results (Kirkpatrick & Kirkpatrick, 2016). This model was selected for its comprehensive approach to measuring both immediate and longer-term training impacts. The current study implemented evaluation across three levels:

- Level 1 (Reaction) employed end-of-session assessment instruments measuring participant satisfaction across four domains: perceived safety, inclusion, content utility, and cultural appropriateness.
- Level 2 (Learning) utilized criterion-referenced multiple-choice assessments administered at program midpoint and conclusion to measure knowledge acquisition.
- Level 3 (Attitude) incorporated pre- and post-intervention questionnaires as well as focus group protocols to assess attitudinal changes.

Phase 4: Deliver (Test)

Workshop Implementation framework

The workshop was implemented through an integrated online learning platform (Zoom), with participants separated by gender for parallel implementation. Female participants completed five 2.5-hour sessions (12.5 hours total), while male participants engaged in four sessions totaling 11 hours, with session duration modified to accommodate group size and interaction patterns.

The instructional team comprised two primary facilitators: a psychotherapist specializing in adult and couples counseling who led core content delivery, and a gynecologist with expertise in infertility treatment who conducted reproductive health components. Gender-matched observers documented participant engagement patterns and gathered systematic feedback throughout the implementation phase.

Results for the Solution Space

Phase 3: Develop (Prototype)

Tested Training Program Prototype
For a complete description of the tested training program prototype, including the learning objectives, outline, facilitation methods and activities and post-workshop assignments, refer to Appendix 2.

Phase 4: Deliver (Test)

Participants Demographics
Consolidating the data of the male and female participants and analyzing the profiles of those who completed around 75 to 80% of training hours, the following was observed: The participant cohort ranged between 10 to 13 females and 6 to 8 males. However, analyses were conducted for the participants who attended at least 4 out of 5 sessions for females and those who attended at least 3 sessions out of 4, for males (i.e., 10 females and 6 males). The male participants showed a median age of 27 years (*M* = 26, *SD* = 5.37), while female participants had a median age of 24.5 years (*M* = 25.60, *SD* = 4.93). In terms of geographical distribution, most participants resided in Amman (60% of females and 66.67% of males), with the remainder spread across other regions, including Irbid, Jarash, Zarka and Akaba. Regarding disabilities, 60% of female participants and 66.67% of male participants had disabilities. Among males, physical disabilities were more prevalent (50%) compared to visual disabilities (16.67%), while females showed an equal distribution between physical and visual disabilities (30% each). Most participants were single, with 80% of males and 90% of females having never married. This distribution aligns with the participation diversity targets set in project design aiming to secure at least 50% of participants with disabilities and at least 50% female representation.

Quantitative Assessment for Satisfaction (Level 1)
Analysis of intervention effectiveness followed the Kirkpatrick evaluation model across three levels. Level 1 evaluation of participant satisfaction revealed consistently high engagement across key dimensions. Male participants reported strong satisfaction with safety (88.89%), inclusion (88.89%), and content helpfulness (100%), with moderately high ratings for cultural appropriateness (72.22%). Female participants demonstrated similarly positive responses, with particularly high ratings for safety (95.35%) and content helpfulness (97.67%), strong inclusion metrics (86.05%), and favorable cultural appropriateness assessments (81.4%).

Figure 2 Course Feedback for Males

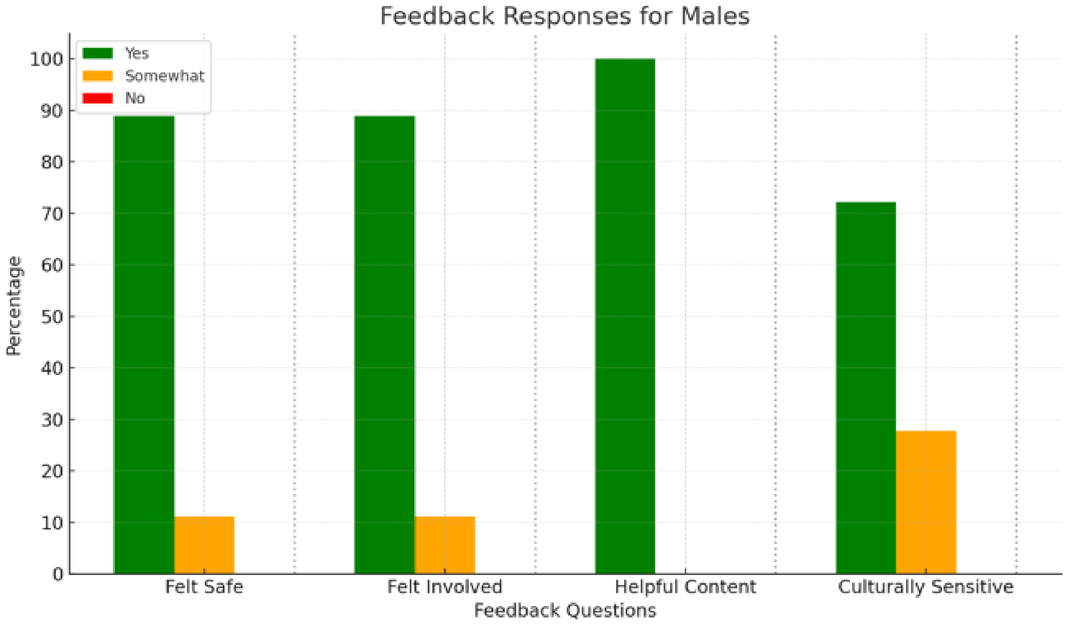
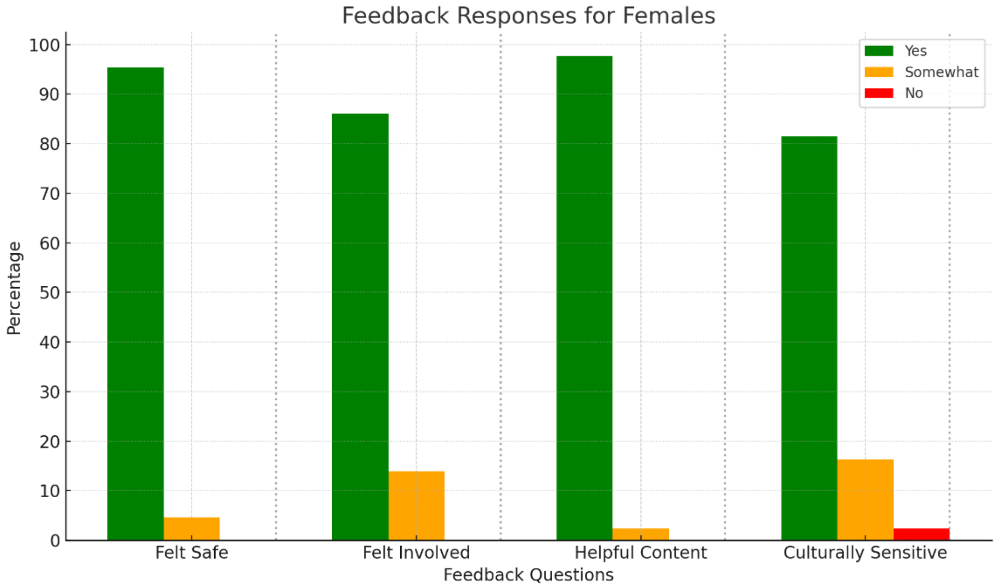


Figure 3 Course Feedback for Females



Quantitative Assessment for Learning (Level 2)

Level 2 assessment of learning outcomes demonstrated strong comprehension levels across all sessions. In Sessions 1 and 2, 83.33% of participants scored 3/5 or higher, demonstrating that a large majority achieved at least a moderate level of comprehension of the foundational material. This positive trend continued and strengthened in Sessions 3 through 5, where 88.89% of participants scored 7/10 or higher, indicating high engagement with more advanced content.

Figure 4. Comprehension Scores for Sessions 1–2

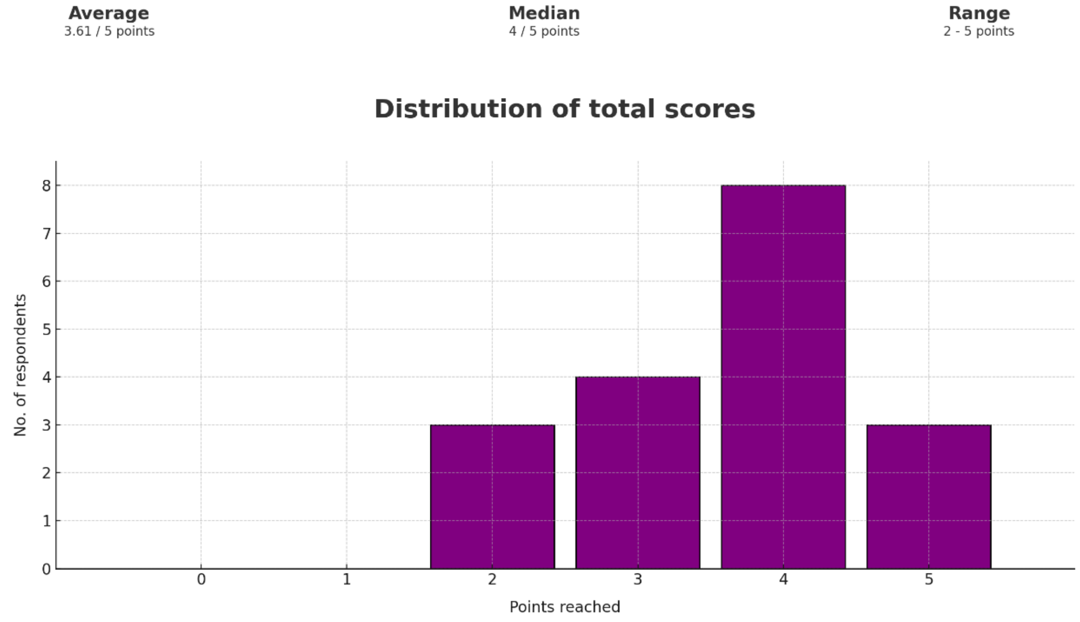
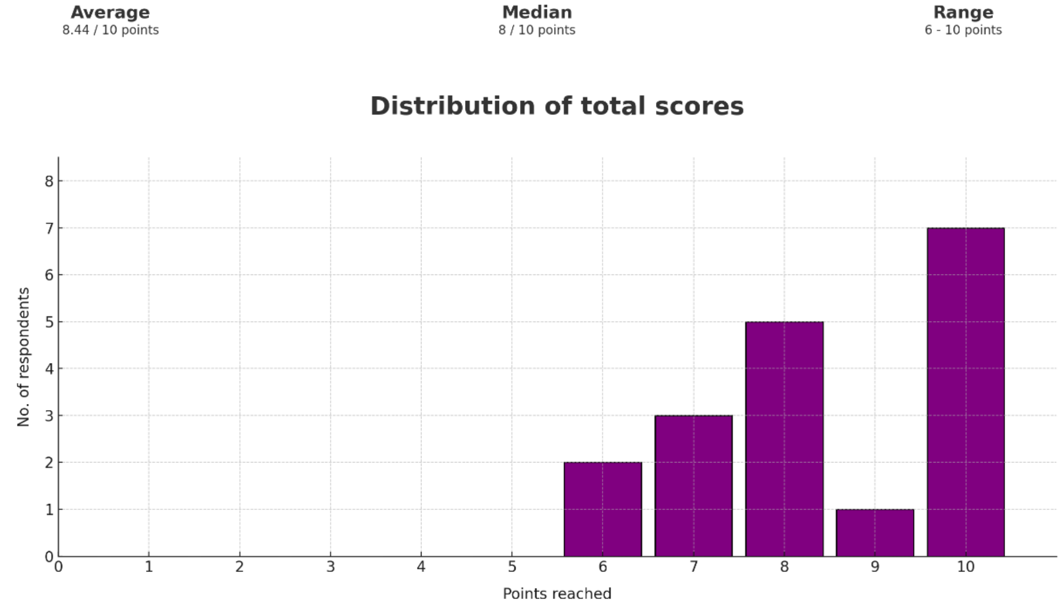


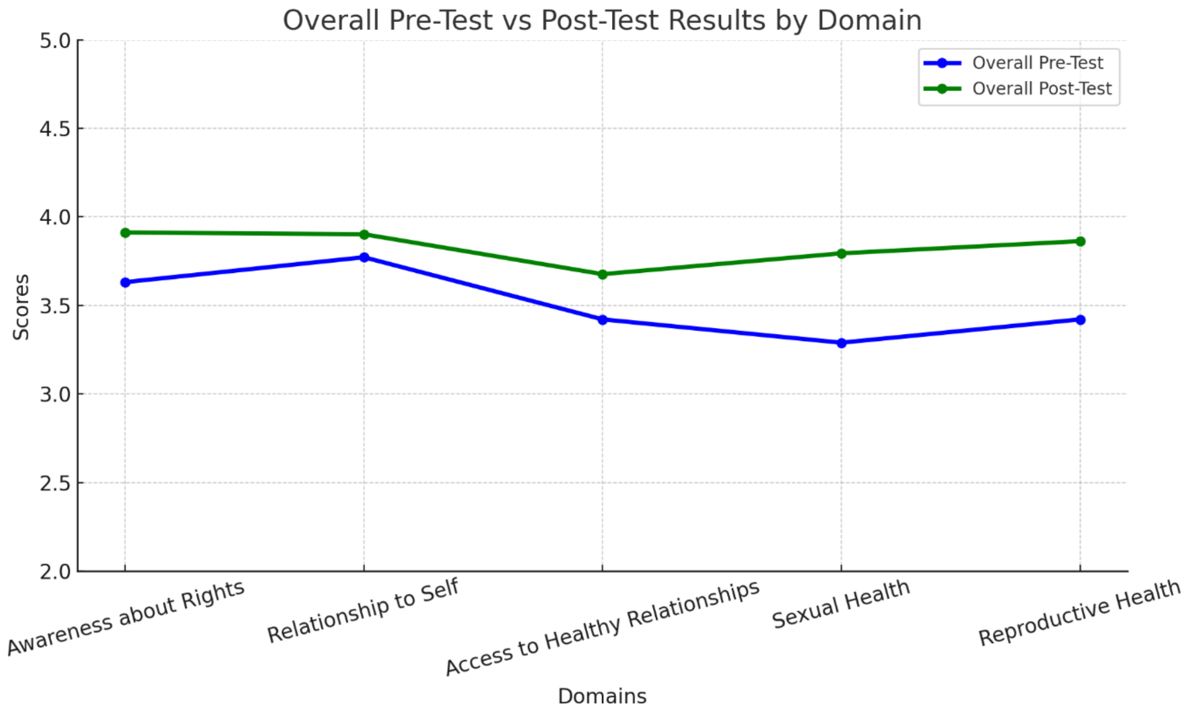
Figure 5. Comprehension Scores for Sessions 3–5



Quantitative Assessment for Evolution in Attitudes (Level 3)

Level 3 evaluation examined attitudinal changes through independent samples *t*-tests, which revealed significant improvements across multiple domains following the intervention. Independent samples *t*-tests demonstrated substantial positive changes in *Awareness about Rights* ($t_{(32)} = -2.27$, $p = .032$), *Sexual Health* ($t_{(32)} = -3.16$, $p = .004$), and *Reproductive Health* ($t_{(32)} = -3.04$, $p = .005$). While attitudes about *Relationship to Self* did not achieve statistical significance ($t_{(32)} = -1.44$, $p = .160$), improvements in attitudes about *Access to Healthy Relationships* approached significance threshold ($t_{(32)} = -1.82$, $p = .080$).

Figure 6. Overall Comparison of Attitudinal Changes Pre- and Post-Intervention



Disability status stratification revealed differentiated improvement patterns. Participants without disabilities (*n* = 16) demonstrated significant improvement in attitudes about *Reproductive Health* ($t_{(15)} = -2.22$, $p = .044$), while other domains showed positive but non-significant changes. On the other hand, participants with disabilities (*n* = 15) exhibited significant improvement in attitudes about *Sexual Health* ($t_{(14)} = -2.21$, $p = .049$), with *Reproductive Health* improvements approaching significance ($t_{(14)} = -2.08$, $p = .069$).

Figure 7. Comparison of Attitudinal Changes Pre- and Post-Intervention for people without disability

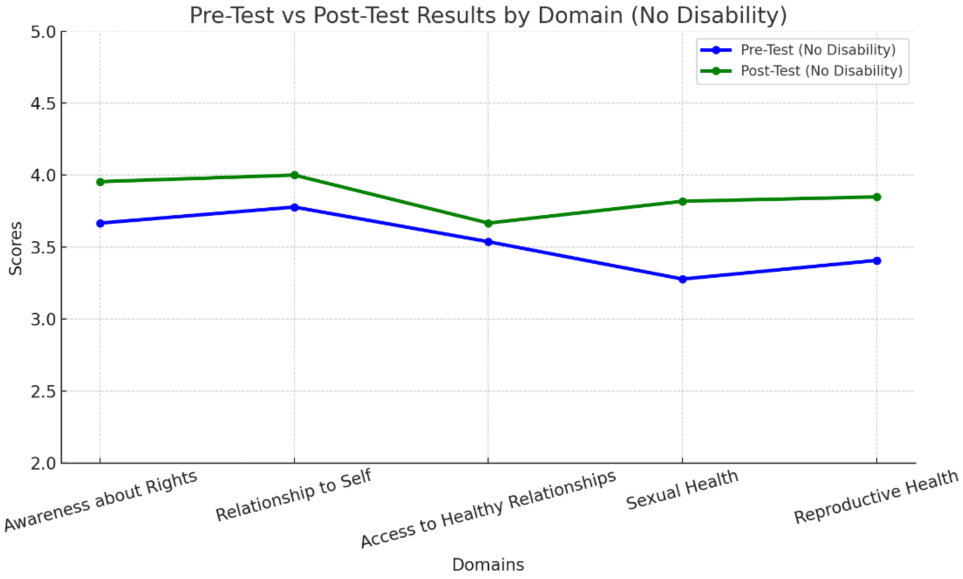
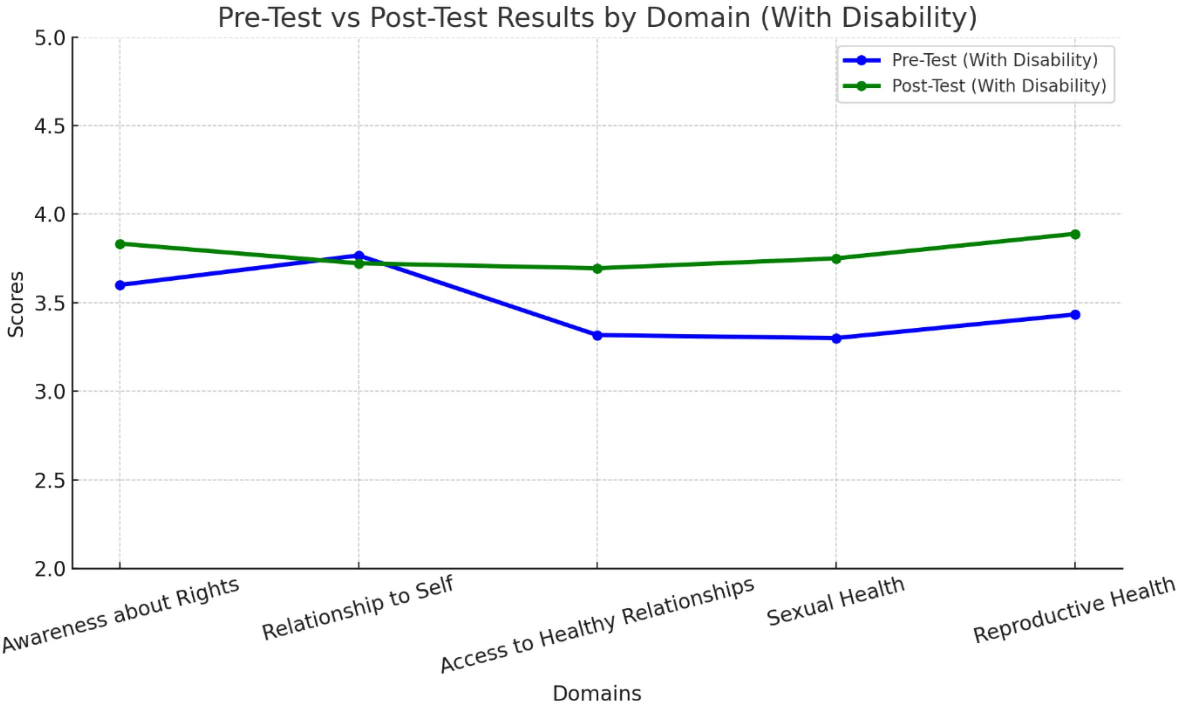


Figure 8. Comparison of Attitudinal Changes Pre- and Post-Intervention for people with disability



Qualitative Assessment for Evolution in Attitudes (Level 3)

Post-intervention focus group analysis revealed substantial positive impacts across multiple domains. Male participants reported decreased self-stigmatization and enhanced relationship-seeking confidence. One participant noted: “This session encouraged me to find the right partner and as a person with disability, not to be ashamed in this area.” Similarly, another male participant shared, “This workshop added my confidence in myself and my acceptance of myself. I believe now that I can marry.” While qualitative data suggests significant growth in self-awareness and confidence, quantitative results for “relationship to self” did not show significant change. The discrepancy suggests that responses to the quantitative survey may have reflected participants’ limited exposure to discussing these topics openly, rather than a genuinely strong relationship with self. This interpretation is supported by qualitative data showing significant growth in self-awareness and confidence post-intervention, despite minimal changes in the quantitative metrics.

Female participants emphasized an enhanced capacity for harassment recognition and response, evidenced by one participant’s assertion: “Why keep the silence about harassment, for the sake of shame.” This attitudinal shift reflected broader empowerment outcomes observed throughout the participant cohort. Additionally, women highlighted how the relationships segment of the program empowered them to “set an agreement at early stages of the relationship,” ensuring mutual understanding with their partner.

Both men and women appreciated the relationships-focused component, which provided tools to discuss relational matters openly with their partners. As one male participant noted, this aspect was particularly impactful, allowing participants to approach these discussions with confidence. A female participant added: “I talked about topics which I did not talk about in my life with anyone," highlighting the transformative nature of the dialogue fostered during the workshop.

The training program's scientific approach received consistent positive evaluation, with participants emphasizing information reliability. One participant's statement exemplified this theme: "Each person should attend such a workshop because it gives reliable information that you do not get otherwise."

Further hearing from participants, the course had an empowering effect on participants with disabilities. Beyond the content that was rights-based, the group composition putting at parr people with disabilities with people without disabilities towards SRH sent a strong message to all, re-affirming the rights of people with disabilities. As strongly expressed by a female participant, in this workshop people with disabilities were established as the "norm": "It was also a strong message that we are the reference, and they have to adapt."

Towards the end of the focus group discussion, participants spontaneously affirmed their rights: "I have the right to choose my partner, marry and have a family"; "I have the right to access comprehensive reproductive and sexual care"; "I have the right to discuss with my partner in advance everything related to sexual and reproductive life." These declarations indicated enhanced rights-awareness. Furthermore, this spontaneous expression of rights was complemented by participants reviewing and fine-tuning a "Bill of SRH Rights," consisting of eleven statements that could serve as a reference charter supporting the future formation of a self-help group.

Implementation Refinements

Based on participants' feedback, elements of course design to maintain Vs those to improve could be identified across three domains: (1) Course Organization and Delivery Format; (2) Inclusion Framework and Group Dynamics (3) Cultural Context and Content Adaptation. Those are described in Table 3 here below.

Table 3. Course Design Elements to Maintain Vs Recommendations for Design Improvement

Elements of Course Design	Elements of Design to Maintain	Recommendations for Design Improvement
Course Organization, and Delivery Format	• Online format provided a safe space for open expression without judgment. • Possibility for those who wish to keep cameras off during discussions (fitting the Jordanian culture). • Mid-session breaks to mitigate screen fatigue. • Dual facilitator approach (psychotherapist and medical expert).	• Consider hybrid or in-person formats to foster stronger connections and allow for better privacy, which was associated with challenges, in the online format: "I had to turn my mobile off when my father entered the room." • Implement shorter sessions (approximately 1.5 hours) with increased frequency (twice weekly).
Inclusion Framework and Group Dynamics; including facilitation approach	• Integration of participants with and without disabilities, sending a strong message in terms of equality in rights, for people with disabilities and challenging prejudice surrounding the SRH of people with disabilities. • Presence of participants without disabilities who had prior experience with disability communities. • Environment where participants with disabilities felt acknowledged in their rights. • Equal treatment of all participants regardless of disability status • Gender-separated groups. • The "break-out room" activity was particularly appreciated.	• Secure representation of people with auditory impairment. • Create more opportunities for peer-to-peer learning. • Provide a little longer time to answer polls, securing a better inclusion of People with visual impairments. • Overall, the highlight towards participants that information shared keeps a generic aspect and that addressing questions, related to specific types of impairments may need more personalized consultation.
Cultural Context and Content Adaptation	• Scientific approach to content design and delivery. • SRHR is integrated within a relational and rights-based framework. • While some females expressed feeling more at ease with a gender-matched facilitator, some saw it as an opportunity: "Having discussed with a male facilitator gives us the confidence to discuss it with another man". • The three-levels impact evaluation (Kirkpatrick approach): ○ Attitudes pre-post assessment methodology ○ Multiple-choice knowledge assessments ○ Session satisfaction polls • Audience consultation and Focus group discussions for qualitative feedback (before and after the course) and customized course design.	• The "Triangle of Power" used as a framework to introduce a safe space was perceived as somewhat complex. Simplify the tool or approach for setting a safe environment. • Where needed, a gender-matched observer is preferred (changed after first session for men). • Some female participants would have preferred a female facilitator for the sexual and reproductive health part. • Incorporate advocacy skills development. • Incorporate more context-specific examples and case studies.

Ethical Considerations across Phases

Methodological consistency was maintained through review of focus group instruments including research protocols and interview guides with the steering committee, ensuring appropriate accommodation of disability considerations and cultural sensitivities. Online focus groups employed Zoom platform. Session structure facilitated comfortable participant disclosure while maintaining appropriate topic boundaries. Transcription processes also incorporated anonymization protocols.

General Discussion

Referring to the study results in its two sections of problem-definition and solution design, we can advance that this study achieved the two key outcomes, formulated in its introduction: "to address identified (policy-practice) gaps through the design, implementation, and evaluation of a disability-inclusive SRHR training program targeting young adults (18-30 years old) through participatory methodologies, with potential for broader national dissemination" and "to support young adults with disabilities in Jordan in accessing their SRH rights". *Given the complementarity of both parts of the study, the discussion addresses both*.

At the level of the group of participants, it demonstrates how young adults with disabilities could be effectively supported by accessing their SRHR through awareness and education, customized to their specific needs. Particularly, the integration of participants with and without disabilities demonstrated how an educational setting can become an advocacy tool, promoting equality of rights in SRHR. As Berger, G., Aresu, A., & Newnham, J. (2022) note, "There is substantial evidence supporting the exchange between persons with and without disabilities, as well as social contact at multiple levels and through multiple avenues, as one of the most effective ways to reduce biases against disability and stigma." (p. 60).

At a more strategic level, the effectiveness of adopting a participatory approach through design thinking emerged particularly in its capacity to address what Hameed et al. (2020) identified as the "implementation gap" between policy and practice in SRHR education; paving the way for a larger scale testing and implementation. Indeed, while studies of this kind typically rely on expert consultation for needs assessment (Gausman et al., 2021) and training program design (Wang et al., 2024), this research extends beyond traditional approaches by integrating user perspectives throughout the entire process. This aligns with Meijers et al.'s (2022) observations about the importance of adaptive program development in conservative contexts while extending their framework to specifically address disability inclusion. The methodological framework provided the foundation for uncovering several significant findings that challenge existing assumptions about SRHR education in conservative contexts, particularly regarding gender dynamics and disability inclusion, as detailed in the discussion from design thinking phases.

Thus, this study can be a useful reference for a variety of stakeholders, interested in advancing SRHR for people with disabilities, including policy makers and training program designers in Jordan or in context that can be comparable to Jordan.

Discussion of the Outcomes from Design Thinking Phases

The Discover and Define Phases: Insights from the "Problem Space" of the Double-Diamond

The Discover phase confirms previously identified barriers in the relationship between disability status, cultural norms, and access to three key domains: SRHR information and education; access to a healthy relational life and access SRH services delivery; putting them within a "user journey".

The documented gender disparity in information access patterns—with males reporting higher rates of taboo-related barriers (83% versus 56% for females)—challenges traditional assumptions about gender-based constraints in conservative societies. This finding contradicts prevailing literature suggesting that females face greater barriers to SRHR information access (PKF ProGroup, 2017) and indicates need for more nuanced understanding of how gender and disability intersect in shaping access to health information. The challenge for males to access SRHR information was confirmed through the observed participation pattern of male groups, at different stages of the study. Indeed, during pre-course consultations and within course implementation, the male group was of a smaller size, indicating the challenge of engaging a male audience and their level of interaction and expression during the course was more discrete; which may indicate a higher sensitivity of this group to the taboo aspect of the topic and how it may weigh more on males, given the social role that males are expected to play in this area. Indeed, in Jordan, alike other Arab societies, traditional cultural norms emphasize masculinity and virility as defining traits of manhood. These expectations discourage men from seeking knowledge or discussing sensitive topics like SRHR, as doing so may be perceived as a sign of weakness or inadequacy.

The Define phase demonstrated the value of reframing the problem in a human-centered way when addressing complex social challenges. This participatory approach invites more comprehensive problem understanding and impactful solution relevance.

The Develop and Deliver Phases: Learnings out of the "Solution Space" of the Double-Diamond

The successful integration of rights-based and relational frameworks represents a significant advancement in SRHR education methodology. This integrated approach effectively addressed the challenge identified by Damra and Hamarsheh (2024) regarding the need for culturally appropriate educational frameworks while maintaining fidelity to international human rights standards. The framework's effectiveness in promoting both knowledge acquisition and attitudinal change, as demonstrated through evaluation results, suggests potential applications beyond the specific context of disability-inclusive SRHR education.

The iterative development process revealed how cultural sensitivity can be integrated in a way to allow for a widened coverage of SRHR education themes. Both committee members and young adults with disabilities endorsed tackling topics that may be perceived as more sensitive. This finding mitigates the prevalent assumption in the literature (PKF ProGroup, 2017) that conservative cultural contexts necessarily limit the scope of SRHR education. Instead, our results suggest that participative design approaches backed by reliable information and safe-spaces creation can achieve both objectives simultaneously.

The quantitative improvements observed across multiple domains demonstrate the potential effectiveness of carefully designed educational interventions. The differentiated impact between participants with and without disabilities—particularly in sexual health knowledge (*p* = .049) and reproductive health knowledge (*p* = .044) respectively—suggests that inclusive educational approaches can effectively serve diverse populations while addressing specific needs. The joint participation of young adults with and without disabilities proved particularly powerful for advocacy. By learning together about SRHR, participants actively challenged common societal assumptions about disability and sexuality. This integrated approach went beyond knowledge-sharing – it demonstrated in practice how inclusive education can drive social change. The program showed that when diverse groups discuss SRHR together, it helps break down stereotypes and validates everyone’s right to sexual and reproductive health education.

The successful implementation of the training program through online platforms demonstrates the feasibility of remote SRHR education delivery while highlighting important considerations for future initiations such as enhanced privacy protocols through hybrid course delivery, exploring multiple channels to outreach a diversified audience and multiply points of contact and expanded disability-inclusion features. This finding extends Meijers et al.’s (2022) work on digital health interventions by demonstrating their applicability to sensitive topics in disability-inclusion.

Methodological Limitations

Several methodological constraints warrant consideration in interpreting these findings. During the pre-course consultation phase, challenges were faced in outreaching to people with disabilities that fit the targeted age group (18-30 years). Additionally, the sample size, while appropriate for initial implementation, limits generalizability of results. The predominantly urban representation may not fully capture rural population experiences and needs. Additionally, while the online format provided advantages in accessibility and privacy, it may have excluded potential participants lacking reliable internet access or necessary technological resources.

The condensed implementation timeline may have also limited opportunities for more development in active learning methodologies, longitudinal impact assessment and skill development evaluation. Future research would benefit from extended temporal frameworks examining the sustainability of observed knowledge and attitudinal modifications, reaching the fourth level of the Kirkpatrick evaluation model.

Similarly, from a solution-design perspective, the developed solution stuck to the original orientation of designing and testing an SRHR training program. Expanding on the possibilities that design thinking can offer, exploring other possible and potentially more comprehensive solutions can be further considered such as the Social Behavior Change Communication" (SBCC), described below.

From a disability-inclusion perspective, exploring adaptation to other types of disabilities such as people with hearing impairment and intellectual disabilities could not be invested.

Directions for Future Iterations – Deepening the application of "Social Behavior Change Communication" (SBCC)

Project design integrated the concept of SBCC - "a fundamental approach in programs that aims to reduce misconceptions, challenge social norms, and promote human rights and Universal Health Coverage for all" by intervening at the "interpersonal, media, and community mobilization" levels (Berger, Aresu, & Newnham, 2022).

Where the current experiential research already integrated elements of SBCC, those can be further scaled up and other dimensions can be added. SBCC dimensions already integrated were the interpersonal dimension - specifically bringing together participants with disabilities with participants without disabilities; the media communication aspect including publishing a newspaper article and an interview with a local radio station and seeking to influence community leadership through the production of a scientific article. Those aspects can be further amplified by integrating the dimension of community mobilization such as supporting workshop participants to advocate for their rights and become social change makers through the creation of self-help and peer-support groups, supported by local Organizations of People with Disabilities (OPDs).

Further research should examine several key areas emerging from this experiential research. Longitudinal studies examining the sustained impact of such educational initiatives could provide valuable insights regarding the durability of observed changes. Additionally, investigating multiple awareness raising channels (e.g. online platforms; online and hybrid courses with the contribution of SRHR community facilitators, combining the advantages of online and in-person delivery formats) adapted to different audiences (e.g. an SRHR course dedicated to parents) can help outreaching people with different levels of access to information and a wider range of people with disabilities and make the change of youth behavior more likely to happen by favoring a supportive social mindset.

This idea is reinforced through participants ideas responding to the question "What do you need to activate the access to your SRH rights?" who brought-in the need to integrate SRHR awareness and education into a broader approach to communication, supporting mindsets evolution; crossing equally recommendations of the steering committee during the "define" phase.

The potential for scaling this educational approach across different cultural and geographic contexts warrants systematic investigation. Future studies might examine how the framework can be adapted for different cultural contexts while maintaining effectiveness. Additionally, investigation of enhanced family and community involvement could provide insights regarding support system engagement in SRHR education.

Conclusion

This experiential research demonstrates how we can support young adults with disabilities in accessing their SRHR and the efficacy of design thinking methodology in developing disability-inclusive and culturally sensitive SRHR education, bridging thus the policy-practice gap. Through systematic application of the design thinking process, the study revealed critical insights regarding both the development and implementation of SRHR education for young adults with disabilities in Jordan. The “Discover” phase uncovered complex intersections between disability status and access to SRHR information, while subsequent “Define” and “Develop” phases enabled development of targeted educational approaches addressing both knowledge acquisition and practical skills development.

The significant improvements observed in *Awareness about Rights* (p = .032), *Sexual Health* (p = .004), and *Reproductive Health* (p = .005) demonstrate that careful attention to user needs can produce meaningful educational outcomes. The differentiated impact between participants with and without disabilities suggests the importance of inclusive approaches that maintain relevance for diverse populations while addressing specific needs of individuals with disabilities. The success of integrating rights-based and relational frameworks offers a promising strategy for delivering sensitive health information effectively.

The participatory approach employed throughout this experiential research provides a replicable model for future initiatives addressing complex social challenges. While challenges persist in providing comprehensive SRHR education to young adults with disabilities in conservative contexts, this study demonstrates that such challenges can be effectively addressed through systematic attention to user needs and innovative educational approaches. Future research should examine the longitudinal impact of such educational initiatives, explore their scalability across different contexts, and investigate a wider application of SBCC, to support sustainable evolution of social mindsets, easing the access to rights, especially in SRHR, for people with disabilities.

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Authors’ Contribution

All authors had access to the data and a role in writing the article.

Declaration of Competing Interest

The authors declare no competing financial interests or personal relationships that could have influenced the work reported in this experiential research.

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Appendix 1 – Participants feedback in pre-course consultations, analyzed by themes and sub-themes

Key Topic	Main Themes	Sub Themes	Definition	Example Statements
1. Access to SRHR Information and Education	**Barriers to Accessing Information (28 occurrences)**	Systemic Taboos (20 occurrences)	Social and cultural limitations to discussing and accessing information about sexuality and disability due to its taboo aspect.	I feel ashamed to discuss this topic with my parents. ... It's impossible to discuss this topic with my parents. At 14 years of age, I used to ask my father .... He used to tell me, "When you grow up, you will know better."
		Systemic Exclusion (8 occurrences)	Structural barriers that prevent people with disabilities from accessing SRH services and information.	The language can be an important barrier for a person with hearing disability and exposing a third-party person (besides the doctor) to my intimate life is embarrassing. Absence of translators in the health sector is an important barrier.
	Sources of Information (37 occurrences)	Informal Channels (25 occurrences)	Information obtained through non-official sources like family, friends, and social media.	We referred to our parents, which sometimes provided us with helpful information and sometimes not. From my friends [...]. We used to ask; we were curious about what happens after marriage.
		Formal Channels (12 occurrences)	Information obtained through official channels like healthcare providers, educational institutions, and religious leaders.	I thought about visiting a primary healthcare center but there is no respect for confidentiality. I chose therefore to go to a private doctor. Once I

Key Topic	**Main Themes**	**Sub Themes**	**Definition**	**Example Statements**
				talked to him, he talked to me in a very relaxed manner. I felt I went to the right person…
2. Autonomy of Decision-Making and Choice (13 occurrences)		Impermissibility of Autonomy (8 occurrences)	Societal and familial restrictions on independent decision-making regarding SRH and relationships.	"Arranged" marriages apply more to men with disabilities rather than to women with disabilities. A man who has a disability, his parents would search for the best wife, so that she serves him; thus, better a person without disability. If his brother wanted to marry a girl with a disability, they would refuse.
		Permissibility of Autonomy (5 occurrences)	Cases and examples where individuals are supported in making independent choices. Support includes:	For me, there is a lot of acceptance, if from my side, I am convinced of the person. As a family, they have the right to confirm, but I decide, at the end.
3. SRHR-related Challenges Faced by PWDs in Jordan and resources	**a.** Specific Challenges (55 occurrences**)**	Prejudice and Social Barriers (21 occurrences)	Societal prejudices and barriers limit people with disabilities' access to relationships and marriage.	Even if the girl accepts you, the issue is with the parents because they are the ones to decide. In our society, families do not accept to marry their daughters to a man with disability. It depends on your perseverance…
		Internalized Barriers (10 occurrences)	Self-imposed limitations result from internalized stigma and prejudice.	Internally, between ourselves, we say "it is difficult to find someone who would accept you. For this reason, we keep a safe distance from other people.

Key Topic	Main Themes	Sub Themes	Definition	Example Statements
				If we have difficulties talking about it between ourselves, how to talk about it with others...."
		Disability-related Vulnerabilities (10 occurrences)	Physical, health, and financial challenges specific to living with disabilities.	Having acquired my disability over 10 years ago still affects me, in my sexual life and in other aspects.
		SRHR-related Taboos (7 occurrences)	Cultural and social taboos specifically related to sexuality and reproductive health.	Before marriage, it was not possible to discuss those topics with my partner. We discussed everything before marriage except this topic (sexual and reproductive health).
		Lack of Education / Awareness and Support (4 occurrences)	Limited access to education and support systems regarding SRHR.	Several people with disabilities, others, society. A person with a disability should be empowered and given the needed skills to be qualified as a spouse.
		Other Challenges (3 occurrences)	Additional challenges not covered by other categories.	IVF is costly. As military personnel, if you don't have children, you can be financially supported by IVF. But if you already have children, then you must finance it.
	b. Specific Resources (17 occurrences)	Couples' Mutual Acceptance and Open Dialogue about SRHR (8 occurrences)	Examples of successful communication and mutual understanding between partners.	My partner and I were very honest in this topic (the privacy of our sexual relationship), especially that it was my first experience in marriage. As both of us were advanced in age and have a motor disability, communication was easy.

Key Topic	Main Themes	Sub Themes	Definition	Example Statements
		Changing Social Behavior around SRHR (6 occurrences)	Open communication about Sexual and Reproductive Health and Rights (SRHR) between partners, friends, or within the community.	The quantity of information about our children available now is way beyond what was available for our generation. I talk about this topic with our boys, while my wife talks about it with our daughter.
		Access to Quality Reproductive Health Services (3 occurrences)	Availability and accessibility of appropriate healthcare services.	As we visit military hospitals, we have access to physical and psychological care after disability.

Appendix 2 – Program description for a disability-inclusive online training on "Building healthy relationships and Sexual and Reproductive Health and Rights (SRHR)"

Course Goals

- Grow skills for building a healthy relationship with a partner, including sexual and reproductive health, through applied concepts and tools targeting people with and without disabilities.
- Empower young adults, especially those with disabilities, in their ability to access the right to family and make independent choices, matching their values and desires and achieving the highest level of sexual and reproductive health.
- Offer the participants the possibility to learn within an inclusive space, to remove barriers between participants, regardless of their differences

Course duration and scheduling

12 hours

Course delivery modalities

Online, through Zoom platform

Target Audience

Young Adults (18-30 years), with and without disabilities

Relational Safety Framework and Group size

- Participants will be organized in two separate groups, one of males and the other for females.
- The group size will be maintained by 12 to 15 participants, to support safety and ease active participation.

Overview of the course flow

Session 1	Session 2	Session 3	Session 4	Session 5
•15 min. - Safe Space •20 min - relationship to self •1hr45 - Rights-based approach for SRH •10 min. session evaluation	•10 min. - Debrief •2hrs10min - Relationship to self •10 min. - session evaluation	•10 min. - Debreif •2hrs20 - Couple Relationship (Continued) •10 min. - Session evaluation	•10 min. - Debreif •2hrs20 - Sexual health •10 min. - session evaluation	•10 min. - Debreif •2hrs20 -Reproductive health •10 min. - session evaluation

Course Evaluation

The course will be evaluated following the "Kirkpatrick" approach, as described below.

Level	*Tool*
Level 1 – Did you like it?	Satisfaction evaluation (Short poll addressed to participants, upon the completion of each session)
Level 2 – Did you learn?	Learning evaluation (Multiple choice questionnaire of 5 to 10 questions about concepts, by mid-way and upon completion of all sessions)
Level 3 – How are you changing your attitudes?	• One attitudes-oriented questionnaire; once before the start of the course and once after completion of the four sessions • Completed by a focus group discussion

Certificate of attendance

Participants having attended the full course are eligible for a certificate of attendance, issued by the Ecumenical Disability Inclusion Advocates (EDAN) and "I Am Human Society for Rights of People with Disabilities" (IAHRPD)

Funding Source

This initiative received funding from ShareNet-International.

Session / Duration / Topic	Learning Objectives	Content Outline	Interactive Activities	Take-away material / Assignments and practices between sessions
Session 1 – Rights-based approach for Sexual and Reproductive Health **& Nurturing a healthy Relationship to self (Part 1)**	• Familiarize with aspects and factors that form one's self-identity. • Identify **the four "Disability Models**" and how each affects interaction with people with disabilities, including in SRHR. • **Identify barriers** that people with disability face around marriageability and SRHR.	• **The "3Ps" safety framework** • **Opening: relationship to self –** Mapping various aspects of my social identity and positioning disability within my identity (see relationship to self-section) • Identify the **four models of disability** ○ Identify stereotypes surrounding people with disabilities. ○ Four models definition ○ How those four models reflect in marriageability and SRH • **Barriers** that people with disability face around marriageability and SRH, illustrated by examples, some coming from participants own experience. • Situate the **right to family and to SRH as part of people with disabilities rights** and	• **In plenary** – discussing the "Permission" and "Protection" participants needs to feel safe and empowered across the course. • **In pairs breakout rooms – share and discuss different dimensions** of participants' social identity. • **In plenary** - Brainstorming about what people say/behaviors/beliefs surrounding people with disabilities • **In plenary - Case studies to** distinguish the four models • **In plenary** – "The wall" exercise to identify barriers (brainstorming) • **In plenary** – identify violations of rights around marriageability and SRH while referring to case-studies	• **International normative references that support the right to family and to SRH (Articles from CRPD and other references)** • **Preparatory exercise for next session –** listing the positive and negative messages I received (or those I tell myself) about myself, as related to my identity as a man or woman and as related to my ability to form and maintain healthy relationships**.** • Additionally, upon completing all the curriculum, participants developed a

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	- Situate the **right to family and to SRH as part of people with disabilities rights**	link it to the **CRPD** and other normative references. ○ Familiarize with the concept of "Human Right." ○ What is "SRHR"? (WHO definition among others) ○ Case studies		consolidate "bill of SRH rights" - Expressing an affirmative statement of their rights, as related to relationships and SRH
Session 2 Nurturing a healthy Relationship to self (Part 2)	- Identify stigma and stereotypes that affect people with disabilities in the areas of relationships and SRH. - Move to a healthier relationship to self	- How do I wear my relationship to myself? (the scarf metaphor) - The four components of self-esteem as per Espere Method and their application to relationships and SRH - The anti-relational system and its applications in the context of disability ○ How those prejudices are internalized through the anti-relational system ○ The five pillars of the anti-relational system: Injunctions – Threats – Devaluation - Guilt and Blackmail	- **In breakout rooms –** sharing positive and negative messages received about self, followed by debrief in plenary. - **In plenary –** brainstorming about different dimensions of self-esteem. - **In breakout rooms –** After having identified the five pillars of the anti-relational system, participants tried to match those messages within those pillars, followed by debrief in plenary.	- Completing the "Relationship to self" session, disability inclusion etiquette was explored with participants in the following session, based on participants request**.** - Test in peers the coaching process to challenge unhelpful thoughts

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		• Common stigma and stereotyped images associated to people with disability, in the areas of relationships and SRH. • Moving to a healthier relationship to self ○ Four steps to challenge self-defeating beliefs, inspired from resilience practices (Exercise)	• **In plenary –** brainstorming about stigma surrounding SRH and disability. • **Demonstration in plenary –** Coaching a participant to challenge his/her unhelpful thoughts	

**Session 3
Building and Maintaining Healthy Relationships**
	The goal of this section is to ***build confidence in one's ability to maintain a healthy, long-term relationship by:***
	• Gaining foundational knowledge to build and maintain a healthy relationship,
	• Developing effective communication practices to nurture relationships
		• Identifying and addressing common ***relationship myths*** and misconceptions affecting people with different disabilities
		• Foundational knowledge to build a lasting healthy relationship.
		  ○ Three phases of couple constitution
		  ○ Recognizing the importance of maintaining individual identity within a relationship (Me/We)
		  ○ Indicators of a healthy relationship (Green, orange, and red indicators)
		  ○ Understanding the "3C" formula: Connectivity, Compatibility, and Commitment
			• **Poll** on different myths surrounding relationships in general, and relationships and disability, followed by discussion.
			• **In plenary –** discussion around the various elements of the foundational knowledge to build a lasting healthy relationship.
			• **In breakout rooms -** on the indicators of a healthy relationship (Green, orange, and red indicators), followed by sharing the learning in plenary.
			• **In plenary –** participants shared different elements of the Relational Identity Card
			• **Demonstration in plenary –** applying the "Active Constructive
				• Completing in a personal manner their "Relational ID Card"
				• Applying the "5 languages of love" questionnaire

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	- Applying active-constructive response techniques to enhance relationship satisfaction and support. *Important note - All material and concepts will be adapted to navigate relationship challenges specific to people with disabilities*	- Three prerequisites to embark in a lasting relationship. - Nurturing the Relationship through communication practices ○ The relational scarf ○ The relational ID Card ○ Active-Constructive Response ○ The five languages of love	Response," between the facilitator and the observer. Participants analysed afterwards how each response style affected the communication.	
Session 4 **Reproductive health**	1. **Understand and manage reproductive health conditions** 2. **Identify and utilize accessible contraceptive methods and fertility tracking tools,** ensuring they are suitable for different	**Part 1: Reproductive Health in men** - The Essential Components of Reproductive Health for Men (anatomy, semen parameters...) - Common Problems in Reproductive Health and management - Focusing on People with Disabilities **Part 2: Reproductive Health in women**	- **Mostly lecture with Q/A** - **6 Polls applied at several points of the workshop**	

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	sensory and physical disabilities. 3. **Develop strategies for accessible prenatal and postpartum care** 4. **Explore assisted reproduction technologies** (e.g., IVF, IUI) and genetic counselling, considering their implications for individuals with disabilities. 5. **Create a supportive environment** that respects and supports reproductive choices, leveraging community resources and healthcare providers	• The Essential Components of Reproductive Health for Women (anatomy, menstrual cycle, concept of ovulation…) • Common Problems in Reproductive Health and management • Focusing on People with Disabilities **Part 3: Screening tests for women in her reproductive age and beyond.** • Breast and cervical screening tests guidelines. • Focusing on People with Disabilities **Part 4: Pregnancy and Prenatal Care Adaptations for non-disabled and Disabled women** • Ensuring prenatal appointments and tests are accessible, including communication with healthcare providers. • Disability-specific considerations and health strategies when planning for pregnancy.		

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		- Strategies for monitoring and managing your pregnancy-related changes alongside your disability. **Part 5: Adaptive Approaches to Childbirth and Postpartum Care** - Tailoring childbirth preparation, delivery options, and labour positions to accommodate your specific disability needs. **Part 6: Family planning Program** - Tailoring types of contraceptive methods in general and for disabled women. **Part 7: Practicing Safe Sex, Preventing STIs.** - Overview of common Sexually Transmitted Infections (STIs). - Methods of STIs prevention. - Addressing challenges in practicing safe sex for people with disabilities. **Part 8: The Importance of Education and Support for People with Disabilities"**		
Session 5	**1. Understand and manage sexual health**	○ Intro - Dispelling common myths about sexuality and disability.	- **Poll –** about common myths about sexuality and disability.	Within the course material, in addition to the

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Sexual health	by dispelling myths, learning basic anatomy, and recognizing the impact of disability on sexual function. **2. Enhance self-esteem and body image** in the context of sexuality for individuals with disabilities, overcoming internalized ableism. **3. Develop effective communication skills** for discussing sexual needs, desires, consent, and personal boundaries, considering the unique challenges faced by individuals with disabilities. **4. Identify and address gender-based violence,**	• Part 1: Fostering Self-Esteem in Sexual Health "Ableism and Body Image" ○ The relationship between self-esteem and body image and sexuality in people with disabilities. ○ Overcoming internalized ableism. • Part 2: Understanding Sexual Health and Anatomy ○ Basic anatomy of male and female reproductive systems. ○ Overview of the sexual response cycle. ○ Understanding the impact of disability on sexual function Part 3: Addressing Challenges and Implementing Adaptations in Sexual Activities ○ Common sexual challenges and their relation to various disabilities.	• **In plenary –** discussion around ableism and body image • **In plenary –** watching and discussing a video of an advocacy campaign led by "Pro-Infirmis" NGO about ableism and body image. • **In plenary –** explanation with Q/A about sexual health and anatomy • **In breakout rooms –** in the domain of SRHR, questions to ask a potential life partner, before engaging in a sustainable relationship, including aspects related to disability. Participants discussed in small group, before sharing their questions in plenary	PowerPoint presentation, participants received a comprehensive document of **twenty-two** pages entitled "An introduction to sexual health and related rights, especially for people with disabilities. The document included information about the impact of different disabilities on sexual life and how to overcome related challenges.

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	abuse, and exploitation, understanding consent and accessing support services tailored to individuals with disabilities. **5. Implement adaptive strategies for safe and fulfilling sexual activities,** including addressing sexual dysfunction, exploring different forms of intimacy, and practicing safe sex to prevent STIs.	○ Addressing sexual dysfunction and challenges related to disability. ○ Exploring different forms of intimacy. ○ Understanding the need for adaptation in sexual activities ○ Diverse positioning, assistive devices, and techniques for different disabilities. • Part 4: Communicating about Sexual Needs and Desires, Consent and Personal Boundaries Understanding barriers to effective sexual communication. ○ Techniques for discussing and responding to sexual needs and desires through empathic communication. ○ Timing and context: When to talk about disability and sexual needs. • Part 5: Identifying and Reporting Gender-Based Violence, Abuse, and Exploitation		

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		○ Recognizing signs of abuse and exploitation. ○ Defining and understanding consent in sexual relationships. ○ Addressing challenges specific to disabilities in the context of consent. ○ Support services for GBV. • Part 6: Reflection to help change social mindsets		