




# Sexuality and Intimacy Rehabilitation for the Military Population: Case Series

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## Abstract

Sexuality and intimacy are important aspects of life that are frequently compromised after severe injury or illness, yet these aspects are often overlooked by medical and rehabilitation professionals. This case series describes the Occupational Therapy Sexuality and Intimacy program at a Military Treatment Facility (MTF). Three diverse clients with a range of physical, cognitive and emotional impairments were chosen to illustrate complexities of the Occupational Therapy Sexuality and Intimacy Program at this MTF, and unique skills employed by Occupational Therapists. Consistent themes discovered include: perceived value of the program; appreciation of safe spaces to discuss personal topics; and enhanced awareness of role identity, body image, and emotional regulation. These cases illustrate that sexuality and intimacy interventions may have profound effects on injured service members, improving social reintegration, and quality of life.

**Keywords** Sexuality · Rehabilitation · Occupational therapy · Activities of daily living · Military · United States

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## Background

Sexuality and intimacy are important elements of peoples' lives [1]. Occupational therapists are uniquely skilled to incorporate the Person, Environment, Occupation, and Performance model to address the challenges with sexuality and intimacy after injury or illness [2–7]. Sexual activity is recognized by the Occupational Therapy Practice Framework as an activity of daily living (ADL), and intimate social participation an instrumental activity of daily living (IADL) [8]. Therefore, initiating discussion about sexual practices should occur during any comprehensive Occupational Therapy (OT) evaluation. Unfortunately, the OT community demonstrates a reluctance in embracing treatment for sexuality due to lack of training, professional guidance and policy, and an overall professional reliance on Western, middle-class values which position sexuality as private and not something that should be talked about [9–12]. Meanwhile, clients continue reporting sex and intimacy as a significant issue, and evidence-based treatment strategies remain absent from literature [13–15].

Sexuality is concerning for combat casualties and has been implicated as a significant factor impacting post-disability relationships [14, 16]. Amputation and genitourinary trauma often lead to sex and intimacy challenges due to pain, loss of desire, testosterone deficiency, self-image and body image challenges, feelings of inadequacy, and lowered self-esteem [17–19]. Furthermore, individuals with cognitive and neurological dysfunction also report similar frustration, with 80% of service members who are diagnosed with post-traumatic stress disorder (PTSD) and more than 60% of those with traumatic brain injury (TBI) reporting clinically-relevant sexual difficulties; these rates are significantly higher than in non-military populations [16, 20].

Previous published studies indicate that individuals with disabilities expect to receive sexual education from their medical providers [12, 21]. In fact, interviewed clients expect their providers to acknowledge challenges they are experiencing with sexuality, and initiate therapies or referrals to appropriate specialists [22, 23].

The Occupational Therapy Sexuality and Intimacy (OTSI) program was initiated in 2013 at a military treatment facility (MTF) to address rehabilitation challenges for service members with complex war injuries. The scope of the program has grown to also accommodate care of other service members, including dependent beneficiaries. The OTSI program consisted of interventions provided by the lead author for clients specifically referred to that provider for sexuality and intimacy assessment and intervention. At the time, there was no other distinguished intervention provided, by the lead author or other occupational therapists, solely for that referral reason within the occupational therapy department. The lead author is a licensed occupational therapist and American Association of Sexuality Educators, Counselors, and Therapists Certified Sexuality Counselor.

## Objective

Although the OTSI program has existed at this MTF for over seven years and supported hundreds of injured service members, similar rehabilitation programs that promote sexual health and intimacy after injury and illness, have not been adopted universally throughout other military, veteran, or civilian healthcare organizations. Moreover, there continues to be a perceived barrier in promoting healthy discussions between providers and clients regarding concerns about sexuality and intimacy. This case series was conducted to

evaluate perceptions of the intervention by recipients to promote the role of OT in sexuality and intimacy rehabilitation.

Our hypothesis is that the service recipients' perspectives will demonstrate clinical intervention for sexuality and intimacy that positively influences participants' sexual and intimate relationships and quality of life. The goal of this report is to highlight the features of the OTSI program, explore its comprehensive nature and effectiveness through the description of three diverse client reports and highlight the unique contributions of occupational therapy to sexual rehabilitation. By sharing this report, it is the aim of the authors' that other healthcare organizations may consider developing similar programs within their occupational therapy clinics and for sexual rehabilitation teams to include occupational therapists.

## Methodology

Given the purpose of this case series through a program description and examining selected case reports, the Department of Research Programs determined this activity to not meet the definition of research (reference #908834) and did not require institutional review board approval. The program description is provided by the first author. To ensure confidentiality, HIPAA release forms were presented and signed by each client prior to initiation of this project. Furthermore, upon acquisition of clinical data, all protected health information was removed, and each participant's name was replaced with a unique de-identified number.

Participants were considered eligible if they had participated in the OTSI program and purposeful sampling was used to recruit participants from a single site who differed in age, diagnosis, and impact of symptoms on engagement in sexual and intimate activities. Evaluators deliberately selected participants who could represent the diverse caseload of the OTSI program. Field note data and interview transcripts were evaluated by the program evaluation team for emergent themes. An approach based on grounded theory [24] was used wherein the interviewer, the research transcriptionist, and a qualitative research expert engaged in open coding and, independently working over transcripts, developed a consensus [25]. A standardized score sheet was used to deconstruct the OTSI intervention into discrete categories of behavior that matched specific features of intimacy or sexual activity.

A retrospective chart review was conducted to extract field note data regarding demographics, diagnosis, specific themes of the intervention provided, and number of intervention sessions. In addition, a semi-structured interview grounded in an interpretive phenomenological analysis was conducted [26]. A qualitative method was chosen to broadly and holistically gather clients' self-report of experience from the intervention, the meaning they ascribe to those experiences, and perception of influence of intervention on self-reported quality of life. A quantitative scalable assessment would not have been sensitive to produce these global reflections. The interview was conducted either in person or over the phone by an unbiased, non-clinical member of the evaluation team. All interviews were audiotaped, transcribed and sequentially reviewed for themes, words, concepts, and experiences with the primary interest of gleaning the service member's perspective of the OTSI program. This perspective was elicited using open-ended exploratory questions such as, "What aspect of the intervention was particularly memorable or valuable to you?" and "What strategies have you continued to use to experience healthy sexual and intimate relationships?".

## Results

This case series consists of three subjects, two male and one female. All three held the rank of a non-commissioned officer in the Air Force, Army, and Navy. At the time of entry into the OTSI program, each was married and their ages ranged from 27 to 47 years-old (average age 35 years old). They attended between 4 and 15 OTSI sessions (average of 8 sessions) over 2 to 14 months and were discharged from services for an average of 12 months prior to their interview.

### Program Description

The occupational therapist chose the Person-Environment-Occupation-Performance (PEOP) model to guide interventions. This model elicits consideration of multiple factors which influence performance in sexual and intimate activities. For example, how individuals' desires and preferences, previous sexual experiences, and sexual values and beliefs interact with a given sexual activity in a particular environment to either promote or inhibit performance. Strategies to enhance performance are customized for each individual considering these factors and their individual standard for performance. Successful outcomes of intervention is monitored via client reported perception of satisfaction with (1) performance in sexual activity, (2) performance in intimate participation with partner, and (3) self-awareness and clarity of self as a sexual being and environmental or personal factors which enable participation in sexual and intimate activities. Of important note, performance is commonly a term used in sexually relevant language to describe the experience or feeling of "being on performance," or the difficulty of maintaining an erection and thus "unable to perform." The OT specifically is referring to performance in occupational engagement from the occupational therapy perspective. Furthermore, the OT often encourages clients to explore ways to be more authentic during sexual experiences and promote focus on the process of pleasure versus sexual performance.

Referrals to this program initially came from rehabilitation specialists, but quickly expanded to a variety of medical, rehabilitation, and behavioral health disciplines, including: couples' therapy, urology, gynecology, social work, psychology, psychiatry, physical therapy, and physical medicine and rehabilitation. Common physical or psychological conditions discussed by OTSI clients are listed in Table 1. While no assessments were used with these three case examples, the assessment most used by the occupational therapist is the Adult Sensory Profile to explore the relationship between clients' sensory processing and their sexual challenges and preferences [27]. Strategies offered by the Adult Sensory

**Table 1** Common physical and psychological sex and intimacy challenges

Physical	Psychological
Erectile dysfunction	Sexual disinterest
Premature ejaculation	Lower overall sexual satisfaction
Anorgasmia	Problems initiating sex
Diminished sensation	Anxiety
Discomfort in body positioning	Depression
Pain	Loss of confidence
Fatigue	Feelings of inadequacy

Profile manual inform strategies tailored by the occupational therapist to apply to clients' sexual goals. Evaluations and treatments within the OTSI program are conducted on an individual basis or with the client and their partner. During the initial evaluation, a dialogue and therapeutic relationship is developed between the client(s) and therapist to help reduce stigma, build open communication, and define common terminology. The intent is to explore the client's sexual and intimate activity goals and understand current barriers to these goals. Treatment sessions consist of identifying and correcting misconceptions and misinformation, while problem solving the individuals' physical, social, and emotional barriers. The occupational therapist strives to include dialogue on activities which could promote healthy sexual and intimate engagements. In addition, the occupational therapist facilitates a better understanding of actions and activities which facilitate and stifle self-perceived optimal performance in sexual and intimate activities (Table 2).

Rehabilitative treatment plans and outcome measures are developed based on each individual's needs and self-reported goals. Common issues include managing pain and fatigue, enhancing sexual desire, augmenting fine and gross motor abilities, employing strategies to enhance emotional regulation and promote communication. The intervention guides clients through a process of how to 'unlearn' harmful messaging or negative societal constructs that inhibit positive acceptance and management of illness/injury [28]. During each session, the therapists emphasizes empowering clients to acknowledge ownership over sexual and intimate abilities, engagements, and rights. Additional topics include: discussing consent, exploring and achieving sexual pleasure, setting healthy boundaries, negotiating sexual decisions, and the importance of engaging in safe sexual practices.

**Table 2** A non-exhaustive list of activities which can facilitate vs stifle occupational performance in sexual and intimate activities

Type	Sexual activity	Intimate social participation
Facilitate	Oral/anal/vaginal sex	Giving gifts
	Making out	Sharing touch
	Digital stimulation of genitals	Communication
	Sensual touching	Kissing
	Role playing	Negotiating responsibilities
	Fantasizing	Acts of service
	Playing dress-up	Sharing time together
	Teasing	Going on a date
	Kink	Words of affirmation
	Masturbating	Initiating a conversation with a potential partner
	Dry humping	Planning a trip with a partner
	Kissing	Establishing sexual and relationship goals
	Sexting/video sex/phone sex	Providing feedback both affirmative and critical
Stifle	Sexual assault	Arguing
	Manipulation (coercion)	Manipulation (coercion)
	Shaming (self or others)	Shaming (self or others)
	Guilt	Guilt
	Fatigue	Fatigue
	Stress	Stress

## Participant 001

Participant 001 is currently a divorced father of two young children. He reported, “the marriage was struggling prior to my injury in 2014, however, the accident made it worse.” The accident resulted in a C7 spinal cord injury (SCI), loss of motor control at C8 level and complete absence of sensation in his genitals. Participant 001’s goals were to enjoy sex more for both him and his partner, find ways to physically feel sexual pleasure, and problem solve mobility restrictions.

Although his marital dissolution may imply a negative outcome from the OTSI program, Participant 001 disagreed. He reported that the primary benefit of the intervention was that it changed his understanding and definition of intimacy. He is now more comfortable with his body and stated, “The most difficult part of the OTSI intervention was not being able to implement what I learned immediately with my partner because of the previously existing issues in my marriage.”

Prior to the intervention, Participant 001 saw intimacy as primarily a “female” experience. During the interview he reported that the intervention opened his eyes to the importance of intimacy for all genders; noting that the intervention helped him accept his current sexual abilities and limitations. He went on to describe his pleasure with implementation of the techniques previously learned in the OTSI program in his current relationship. Outcome measures were self-reported and he reported that he enjoyed sex now with a reduction in stressors such as relationship strain, difficulty navigating mobility restrictions, and feeling physically disengaged during sex. Participant 001 concluded that the program taught him to focus “on the things that are still pleasurable” during sexual activity, and that, “just because I don’t have feeling in the sexual region, other points are sensitive, and bring pleasure.”

## Participant 002

Participant 002 was initially seen for complications associated with pregnancy resulting in the identification of a 3.2 cm tumor on her brainstem. Postpartum, the tumor was successfully resected, and she was medically cleared to return to normal activities. However, the surgical insult and subsequent scar tissue distal to the incision at the base of her skull, resulted in experiencing severe posterior neck spasms and migraine headaches during and post orgasms. Participant 002’s goals were to reduce anxiety related to engaging in sexual activity and decrease pain during sexual activity.

The excruciating pain she experienced with orgasms resulted in severe anxiety and avoidance of all sexual activities. She found OTSI intervention to be a helpful and reported,

OTSI expanded my understanding of what might constitute as sexual activity. The intervention provided relief for both myself and my partner by taking the pressure off penetrative sex and orgasms. This additional knowledge allowed us to explore each other and identify activities of pleasure.

She reported the program helped decrease anxiety by improving the couple’s communication about sex and intimacy.

Prior to intervention, Participant 002 was afraid of kissing her husband or showing attention fearing that she was misleading him into thinking she desired sexual intercourse. As part of the intervention, Participant 002’s husband attended four sessions. They independently wrote lists of what sexual acts they would enjoy in order to choose activities they

both wanted to do which also did not cause her pain, thus decreasing Participant 002's anxiety surrounding sexual activity. By completing the program, she and her husband shifted their focus from a performance-based model of sexual activity, with emphasis on penetration; to a pleasure-based model that places greater value on foreplay and other "sexplay" activities which do not result in pain. Outcome was measured through participant 002's self-report of 0/10 pain with sexual activity and an enthusiasm for sexual activity versus anxiety.

Since completing the program, the couple has continued to adjust to their "new normal" of sexual activities and intimate social participation. They found increased communication helped address assumptions, expectations, and fear of rejection. Currently, Participant 002 reports, "strategies promoted in the OTSI program have become more natural and are incorporated into her daily life."

### **Participant 003**

Participant 003 is a husband of over two decades and father of three. He and his wife had a healthy relationship and enjoyed sexual encounters multiple times per week. This changed in 2014 when he was involved in a military training accident, resulting in a right above knee amputation and anoxic brain injury. Prior to these injuries, Participant 003 was already working through long-term psychological challenges resulting from PTSD related to previous combat trauma. After his amputation, he did not feel "normal" which resulted in his desire to remain in the "patient role" and included abandonment of all family responsibility and sexual activity. Specific goals of treatment were to increase self-esteem, increase desire, and address mobility limitations.

His involvement in the OTSI program improved the couple's communication and encouraged them to experiment with sexual positions that would accommodate his amputated leg. In addition, he and his wife reported that the book, entitled "Sex and Intimacy for Wounded Veterans: A Guide to Embracing Change" [17], also helped during their recovery. Through the OTSI program the couple was able to address negative assumptions, and re-initiated sharing through touch, communication, and date nights.

The intervention helped Participant 003 and his spouse set goals that evolved based on their needs. It also taught them the importance of acceptance and body image. Working together Participant 003's attitude towards sex became more playful, which lessened frustration when everything did not go as planned. The couple reported becoming more open minded when it came to sexual activities and communication. They attribute these changes to an increase in participant's report of confidence in his mobility during sexual activity and not viewing his new body as a limitation.

Gradually, Participant 003's spouse was able to transition out of the caregiver role, and Participant 003 resumed his pre-injury family and household responsibilities; he reported, "The OTSI intervention got me back into the husband role and out of the patient role." Ultimately, Participant 003 reported: "the OTSI program was successful, with the proof being that we're still together." The spouse elaborated "I am not sure how things would have gone if we didn't do it, to be honest with you... I don't know if we would have made it." The couple reports the client reassuming his old roles helped increase self-esteem resulting in an increase in his sexual desire.

## Emerging Themes

Five common themes presented themselves as important factors that positively influenced the unique elements and efficacy of the program. Each theme is subsequently described below and should be considered when developing any future sexuality and intimacy rehabilitation programs within other healthcare organizations.

### Using the Therapeutic Relationship to Establish a “Safe Space”

Due to the personal nature of this topic, it is unlikely that many of the clients would discuss sensitive topics without being invited to do so by their provider. Discussing sexuality and intimacy requires a safe space to work through personal challenges which are negatively affecting the clients’ emotional well-being and possibly their relationships. Acclimating to a new norm can be both physically and psychologically uncomfortable but will never start if the provider does not employ therapeutic use of self when initiating the conversation.

### Defining Sex and Intimacy

Sex is not typically just intercourse, and can be influenced by emotional intimacy. A key aspect of the intervention program must include: expanding participant’s definition of sex from a performance-based to a pleasure-based definition focusing on erogenous zones (other than genitals), understanding differences between sexplay and foreplay, and understanding the relationship between sex and intimacy. For individuals with visible injuries, addressing self-beliefs relating to body image that governed the client’s life before injury, and adapting them to life post-injury. Broadening the client’s understanding of the complex nature of both sex and intimacy is an important step to re-engage in sexual activity.

### Promoting Communication

Building and maintaining intimacy within a relationship is imperative and heavily reliant on successful verbal communication. The need for communication and collaboration within a relationship is critical, especially when addressing sexual goals and desires. Discussions include using positioning aids, sex toys or prosthetics, trying different positions, recommendations on technique, and scheduling sexual activity. Good communication will ensure expectations are aligned and realistic for all participants. Effective communication is often precipitated by positive emotional regulation, stress management, self-care, and positive self-esteem which are skills discussed during intervention.

### Understanding Role Identity

The potential to improve a client’s identity by viewing themselves and their partner as equals in a relationship is essential when considering overall quality of life. For individuals with acquired injuries, it is not common for them to receive assistance from their partner prior to their injury. Remaining in the “patient” role causes excessive stress on the strongest relationships. By reengaging in occupational responsibilities clients



become part of the family and society again. Most importantly, relearning to spend quality time with a significant other, the family, and social network promotes healthy relationships. Improving the client's role identity promotes increased satisfaction in areas of their life where they have control and reduces stress where they may no longer feel in control.

### **Modifying Routines**

Participants all reported a modification of not only techniques during sexual activity but also their sexual routines. Participants reported not considering the routines around sexual activity as influential to the actual activity and reported benefit from building awareness of the impact and modification of their habits and routines. The occupational therapist conducted an in-depth review of the participant and their partner's routines around sexual activity. The OT inquired about when sex occurs, who initiates, how does sex end, and what precipitates and proceeds sexual activity. Through the evaluation and modification of routines, the clients were able to schedule sex to accommodate for pain and fatigue, integrate necessary communication of expectations or flirtation to reduce anxiety or facilitate desire prior to sex, and explicitly discuss how sex will end so both partners feel satisfied as they transition from erotic or intimate time back into the folds of daily life.

### **Discussion**

The reports from these unique participants of the OTSI program demonstrate the importance of conducting holistic intervention to evaluate and treat sexuality and intimacy of individuals with severe injury or illness. Furthermore, each participant self-reported that sexuality and intimacy have a significant impact on their quality of life and meaningful social reintegration. Their appreciation of the OTSI program included establishing and maintaining meaningful relationships, and learning to use new devices, techniques, and strategies to build an acceptance of a new body-image and post-injury identity. Occupational therapy professionals are uniquely trained in analysis of the internal and external barriers to engagement in activity, making them uniquely qualified to holistically assess physical, cognitive, and emotional factors required for engagement and the environmental factors which enhance engagement for sexual and intimate activities. Multidisciplinary sexual rehabilitation teams should consider including an occupational therapist on their team to contribute insight on holistic factors impeding participation and focus intervention on integrating all of the team's recommendations into clients' daily routines.

### **Implications for Occupational Therapy Practice**

To the authors' knowledge, this is the first case series to demonstrate service recipients' perspective of an OT led sexuality and intimacy rehabilitation program within the literature. Consequently, further scientific analysis and comparison of the OTSI program with other interventions of this type are limited because of the paucity of current literature. Current occupational therapy literature related to sexuality identifies individuals

with disabilities as sexual beings [29, 30] the factors enabling lack of preparedness to incorporate sexuality and intimacy into clinical or academic practice [11, 12] and recommendations for occupational therapy pedagogy [31, 32]. One case study evaluating an intervention related to sexuality was identified in the literature [33]. This case study evaluated the impact of an occupational therapy psychoeducational group intervention to sexual and reproductive health knowledge of adolescence. While the study differs in methods, intervention, and population, it is similar to this case series as it is another unique study supporting the benefit of occupational therapy services focused sexuality and intimacy.

### Implications for Clinician who Address Sexuality

While scholarly research is paramount for the implementation of sexuality and intimacy interventions, it is only a part of mitigating the problem. Sociocultural norms, lack of standardized education, and institutional limitations are also barriers to addressing clients' sexuality and intimacy needs [10–12, 34]. Steps beyond establishing effectiveness must be taken to make changes that will influence widespread implementation. The authors posit the following implications for holistically addressing sexuality in healthcare settings and increasing the number of healthcare professionals prepared to address sexuality in their clinical practice:

- Healthcare professional leaders and change-agents who specialize in sexuality can leverage top-down influence to empower educators and clinicians to address sexuality and intimacy. They can do this through a commitment to (1) curriculum standards for healthcare educational programs for sexuality topics above and beyond the physical aspect of sexuality, (2) clinical program development, (3) clinical professional training for sexuality and intimacy [35, 36].
- Clinicians who address sexuality in clinical practice should consider the influence of routines on enabling positive sexual experiences. For client who experience anxiety, pain, fatigue, or low desire, the sequence of activities leading up to sexual activity or afterwards can be very influential to enabling positive experiences during sexual activity.
- While the Adult Sensory Profile was not use on the three participants highlighted, it is the most common assessment used by the lead occupational therapist for the OTSI program. Client's sensory preferences and regulation needs might also be overlooked by clinicians who address sexuality in clinical practice. Clinicians can consider the role sensory preferences play in emotional intimacy and sexual activity [37].

### Limitations

Future research should include a larger retrospective and prospective study inclusive of participants who represent a variety in gender identities, sexual orientations, and relationship status for example single and polygamous relationships. Goals and outcomes were developed through a collaborative process between client self-report and the clinician. A limitation of evaluating the interventions effectiveness is the lack of standardized assessment used to guide goals and outcomes. In 2020, the Occupational Performance Inventory for Sexuality and Intimacy was published, which could be considered as an assessment for future prospective studies [38].

Given that this is a case series of three distinct individuals who completed the sexuality and intimacy occupational therapy program, caution should be taken when extrapolating the information. The authors acknowledge limitations of generalizability; however, case studies often provide valuable information on the particularity of an intervention which can be formative to program improvement or future program development at other facilities. They sought to explore specific and likely distinct experiences of these three individuals to perhaps identify a shared experience. Simons provides guidance on application of case series “If we study the singular case in sufficient depth, and are able to capture its essence—what makes it unique—in all its particularity, I believe we will also discover something of universal significance” [39]. Given this viewpoint, perhaps readers could consider how a similar intervention could be applicable and helpful to their particular client population.

## Conclusion

Openly discussing sexuality and intimacy reduced stress after physical and psychological trauma, improved relationship, and fostered healthy sexual and intimate practices for injured service members at this MTF. This case series raises awareness of social, emotional, behavioral needs, and resources required for clients to reengage in valued activities. This information can inform OT practice, curriculum, dialogue, programming, and research to identify effective assessment and interventions for sexual activity and intimate social participation engagement. A better understanding of effective interventions will equip OT practitioners with knowledge to guide interventions and contribute to interdisciplinary sexual rehabilitation teams.

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**Availability of Data and Material** The data and material will not be made publicly available.

## Compliance with Ethical Standards

**Conflict of interest** The authors have no conflicts of interest to declare. The views expressed in the article are those of the authors and do not reflect the official policy of the Department of Army/Navy/Air Force, Department of Defense, or U.S. Government.

**Ethics Approval** The Department of Research Programs at Walter Reed National Military Medical Center determined this activity to not meet the definition of research (reference #908834) and did not require institutional review board approval.

**Consent to Participate** In order to ensure confidentiality and participant consent, HIPAA release forms were presented and signed by each client prior to initiation of this project.

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