Investigating the Link between Reproductive Health Neglect and Offending Behaviour in Females with Intellectual and Developmental Disabilities

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Abstract

This research explores the bias-altering intersection of reproductive health neglect and offending behavior among women living with intellectual and developmental disabilities (IDD). Offsetting health needs have been shown to adversely impact behavioral functioning in IDD populations, yet reproductive health remains an especially neglected dimension. With a cross-sectional mixed-methods design, data was obtained from 174 females with IDD diagnoses from residential and institutional facilities. Quantitative measures included indices for reproductive healthcare, behavioral health risk scoring, and historical legal documentation. The results indicated that high neglect scores were associated with a 2.8-fold increase in documented offending behaviors largely comprised of reactive aggression and legal non-compliance. Regression models defined reproductive health neglect as a significant predictor of behavioral risk ($p < 0.01$), amid controls for nominee age, disability grade, and social support access. Further cluster analytic examination identified distinct risk profiles where neglect was coupled with poor medication compliance and diminished health agency. Qualitative analysis reaffirmed the quantitative findings, surfacing discomfort with institutional policies, caregivers, and low reproductive health literacy as system barriers. The research highlights the critical gaps in service delivery for people with disabilities and the corresponding behavioral escalation and criminalization of these individuals. Policy suggestions center on heightened inclusive care staff training as well as diversionary approaches aimed at proactively screening justice-involved women with IDD.

Keywords *Reproductive Health Neglect, Intellectual and Developmental Disabilities (IDD), Female Offending Behavior, Health-Justice Intersection.*

Introduction

Background and Rationale

Neglected reproductive health coupled with offending patterns in women with IDD poses a strikingly underexplored intersection of public health and criminal justice [1]. Reproductive health encompasses biological events such as menstruation, fertility, and contraception as well as social aspects, including bodily autonomy, decision-making, and dignified access to medical care. Many women with IDD face barriers to self-advocacy due to systemic exclusion, cognitive vulnerability, a compromised agency, and a high degree of dependency on caregivers or institutions which diminishes their ability to exercise these rights [2]. Efforts toward claiming reproductive health as a universal right continue to be problematic and are often denied, particularly for people with developmental disabilities.

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This denial is pronounced in custodial or semi-custodial settings where the individual's autonomy is heavily dictated by external authorities [3].

Behavioral problems in females with IDD (intellectual and developmental disabilities), ranging from minor legal offenses to more serious behavioral concerns, have traditionally been examined exclusively within forensic or psychological paradigms that ignore relevant health-related factors [4]. New research suggests that behaviors deemed defiant, violent, or criminal in nature often arise from unresolved somatic distress, particularly pertaining to reproductive health issues [5]. Long-standing pelvic pain or other menstrual-related issues, as well as hormonal changes, are often labelled behavioral problems and punished rather than treated. The failure to understand these underlying health factors results in a lack of proper diagnosis and treatment, leading to wrongful treatment, increased reliance on legal and correctional systems, and more severe punitive measures [6].

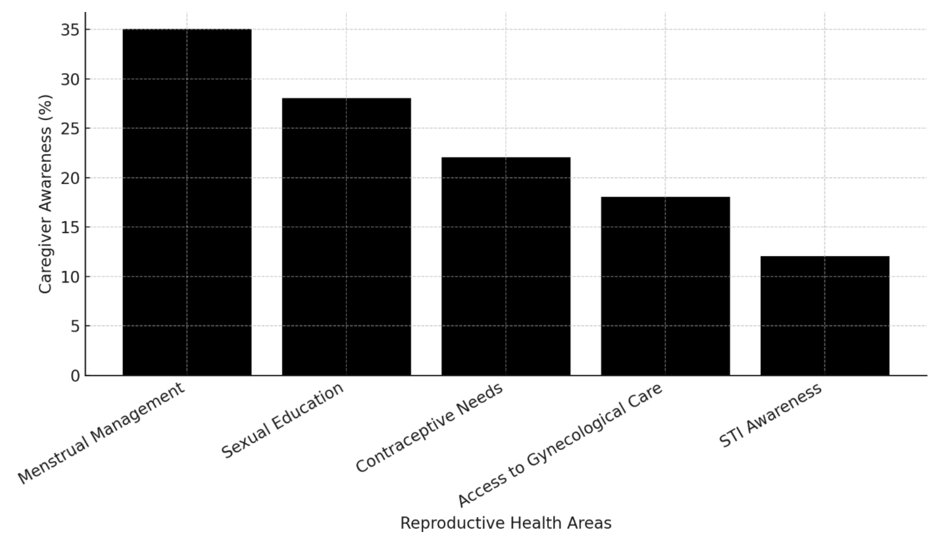
Women with IDD hold a distinct disadvantaged status because of the dual oppression they experience as both a person with a disability and a woman [7]. This vulnerability is manifested in the socially historically patterned reproductive control exercised over them through sterilization without their consent, contraceptive denial, and educational neglect about their own reproductive systems. At the same time, actions associated with reproductive trauma or discomfort are often viewed as deliberately defiant, thus resulting in punitive rather than rehabilitative supportable responses. In numerous institutional and community-based contexts, aggressive behavioral episodes or non-compliance are dealt with through behavioral management systems that do not assess the individual's overall reproductive health [8].

Within the clinical literature, there are cases of some females with IDD having conditions such as dysmenorrhea, endometriosis, or polycystic ovarian syndrome which go unrecognized and untreated [9]. The physiological discomfort further contributes to some form of behavioral dysregulation and instability. These patients may present with some form of aggression, agitation, or social withdrawal, which are often misinterpreted as behavioral problems. Caregivers, who often are the first point of contact in the health care system and play a crucial role in the health access decision-making process, may be poorly equipped, or simply not educated, to make the link between reproductive discomfort and behavioral symptoms [10]. In this scenario, the level of a caregiver's awareness operates as a pivot on which the inattention suffered by a particular caregiver can either be alleviated or aggravated.

To depict the extent of the gap in awareness, basing our observations on the findings of the caregiver awareness study conducted by our group represents Figure 1. The assessed understanding of five critical reproductive health areas for women with IDD shown on the bar chart shows dangerously low levels of awareness. ILLUSTRATE DATA. This reinforces the paradigm neglect hypothesis, where caregivers are not equipped for essential care attentive to reproductive health.

This study addresses the need to empirically investigate the relationship between neglecting reproductive health and offending behavior. It attempts to fill the research and policy gap, concerning behavioral risk assessments which often overlook reproductive health metrics despite ample anecdotal and clinical evidence suggesting relevance. By positing the neglect of reproductive health as a potential precursor to offending, the study seeks to explain the behavioral complexities of this population. The aim is not just to demonstrate statistical correlations, but also to situate the systemic fractures that delineate integrated responsive health and behavioral support services alongside the care hurdles integrative systems disabilities.

Figure 1 Caregiver Awareness of Reproductive Health Needs in Females with IDD



Research Objectives and Hypotheses

This study aims to accomplish three goals that are connected and together advance the understanding of the reproductive health neglect as a behavioral risk factor. The first goal is to assess the breadth of neglect of reproductive health by females with intellectual and developmental disabilities in institutional and semi-independent living settings. It is hypothesized that neglect will be most severe in areas requiring proactive care, including gynecological examinations and contraceptive consultations, because of culturally entrenched taboos and institutional discomfort with the sexual and reproductive health care of disabled people.

The second goal is to analyze the statistical relationship between reproductive health neglect and documented offending behavior. The study hypothesizes that higher levels of reproductive health neglect will be associated with more frequent violent and/or more severe invasive legal or quasi-legal behavioral scrutiny. Examples of such behavior include physically aggressive outbursts, destruction of property, and chronic behavioral non-compliance in structured settings. This relationship is expected to remain even after controlling for the covariates of age, and sex, the severity of intellectual disability, and the type of residential setting.

The third objective is to recognize and explain the factors explaining reproductive neglect and offending behavior. Such gap may include institutional policy omissions, caregiver training deficits, poor health literacy, and limited availability of educational resources structured on rights attuned to health for persons with IDD. The study hypothesizes that these systemic barriers behave as a feedback loop whereby neglect motivates behavioral escalation which elicits punitive responses that further restrict access to appropriate care.

All these goals and working assumptions integrated into a coherent framework constitute the study's designing and analytic construction. They guide the creation of data collection tools, the arrangement of calculation models, and the analysis of wider group phenomena. In studying offending behavior, the research does not stratify it as a legal issue but places it within a wide constructs of biopsychosocial frameworks in which neglect of reproductive health is a focal point of examination with possible causal relationships.

Scope and Limitations

The study focuses on females aged 15 to 45 years with intellectual and developmental disabilities living in long-term care facilities, supervised group homes, or partially independent community settings. Medical records, caregiver questionnaires, structured behavioral logs, and, when possible, interviews conducted with adapted communication strategies, as well as direct interviews, served as data sources. Participants needed to be able to communicate at least moderately well as all but the profoundly apathetic cognitively dissenting person were considered able to provide some form of consent or dissent.

Despite the rich dataset from multiple viewpoints, these boundaries defined by study design have their challenges. Another significant challenge is reliance on caregiver-reported data, which may be subject to recall bias, stigma, or social desirability concerns around sensitive issues like reproductive health. From an institutional perspective, behaviors are often defined and recorded differently which affects standardization of the severity and type of offending behaviors. Additionally, legal definitions and reporting procedures differ from one jurisdiction to another resulting in restricted breadth for legal outcome data generalizability.

While the statistical modeling techniques, as well as subgroup stratification, do attempt to ease a bit of this cross-sectional study's limitations, they still do not allow for a causal inference to be made. Additionally, the absence of real-time observation may lead to understating the occurrence and context of certain actions—especially those that do not result in formal disciplinary action—and is likely less ubiquitous than it is imagined to be. Regardless of these difficulties, the disparate data sources bound within a single analytical approach reinforces the confidence placed in the findings. The ethical aspect of the study is well captured in the data anonymization procedure as well as obtaining consent using cognitively accessible methods that does circumvent consent challenges.

Relevance to Policy and Practice

This research intends to aid in the development of more targeted policies and actionable strategies to govern policies in disability services, reproductive health, and criminal justice. Currently, there is an alarming absence of indicators of reproductive health in behavioral support frameworks, risk assessments on incarceration, and even diversion programs tailored for women with intellectual developmental disabilities (IDD). Such disregard fuels a fragmented system that, instead of treating health issues in the light of behavioral mitigation, isolates them—a response to the person that is fundamentally misguided.

The study provides a persuasive argument for merging health and behavioral management systems by teaching reproductive health and behavior physics health along with physiology, completing menstrual and contraceptive cycle evaluations, and drafting "care first" disciplinary policies. These policies focus on giving health informed care rather than punishment centered on infringing behavior.

From the recommendations going forward, the study found gaps that advocate for reproductive health education, calling for the caregiving and frontline instructional staff working with women in institutions with Intellectual and Developmental Disabilities (IDD) as mandatory attendees. Additionally, it recommends incorporating systematic gynecological preventative checkups as part of the health service delivery packages for the disabled. These findings could impact the justice system by shifting the direction toward developing diversion schemes that take into account health-related issues linked to behavioral offending breaches of infractions and encourage the use of therapeutic measures instead of harsh, caged responses.

In a more expanded outlook, the study places its focus toward advocacy for an improved model of understanding, where the care system is within a rights framework to guide provisions for women with IDD. Highlighting reproductive health as central to determining behavior and legal outcomes pushes the boundaries of correctional systems to rethink strict punishment oriented methodologies into frameworks that emphasize health and social equity focused interdisciplinary justice instead.

Theoretical and Conceptual Framework

Models of Reproductive Health Neglect in Marginalized Populations

Reproductive health neglect is an enduring concern among marginalized population groups such as persons with disabilities, women in long-term care, and those facing multiple social disadvantages [11]. Some theorists attempt to explain how systemic neglect operates and perpetuates itself within such populations. One such theorist is the proponent of the Structural Violence framework which articulates how social arrangements not based on direct person-to-person violence, but indirect forms of violence, systematically abuse people by limiting access to vital resources and fundamental rights [12]. Within reproductive health, structural violence is apparent in the form of barriers disabled people face to service access, inadequate training for service providers, policy obstructions, and bias that does not recognize the reproductive agency of people with IDD.

Another primary model of importance here is the Social Ecological Model, which provides context to reproductive health outcomes at the individual level and at the interpersonal, institutional, community, and policy levels. For women with IDD, barriers tend to operate at all these levels simultaneously. At the individual level, the cognition challenges may hinder the understanding of health risks, functioning or anatomy. At the interpersonal level, decision-makers may provide information and make choices that are too decisively unilateral. The absence of trained gynaecologists or accommodating facilities for patients with concomitant developmental issues represents institutional-level gaps. At the policy level, Guidelines governing disability reproductive health often lack provisions that address disabilities [13]. These factors interrelate in crafting a loop of neglect where systemic barriers are absorbed as self-imposed restrictions, fostering learned helplessness, shame, and silence [14].

The Reproductive Justice framework is a closely aligned theoretical model that arose from feminist and civil rights movements emphasizing the right to have a child, not to have a child, and to parent in safe environments. Concerning women with IDD, this model compels a transformation of practice because many violate these principles, at worst, under protective or clinically efficient reasoning. The absence of period management, contraception, and sexual education services and the denial of information pertaining to these services equally breach reproductive justice. Of equal importance, this framework understands neglect as not only the absence of services, but the active denial of autonomy and choice.

When applying these models to the study's target population, it is clear that reproductive health neglect is not an oversight; rather, it is systematically located within a structure.

The longitudinal accumulative neglect leads to long-term neglected pain, sexual identity confusion, systemic medical dependency, chronic anxiety, and dysregulated social behaviors, resulting in a range of enduring and complex physiological and psychological consequences. Often, care strategies that are motivated by fundamentally flawed assumptions exacerbate these effects, assuming them to be behavioral or psychological disorders, leading to interventions that are symptom focused rather than root cause focused. Collectively, the discussed models advocate for more powerful steering interventions that transcend these diverse systems while upholding a reproductive health rights advocacy approach that considers reproductive health an essential component of health and well-being.

Theories of Offending in Persons with Intellectual Disabilities

The offending behavior of persons with intellectual disabilities posed a challenge to the vast segment of criminology which focuses on rational decision-making, the presence of legal capacity, and socially accepted development trajectories. Older frameworks, Rational Choice and Classical Deterrence, do not account for the behavior of people with some level of cognitive or adaptation difficulties. On the other hand, its latest developments within the integrative and developmental models do seem to account for offending behavior in individuals with intellectual and developmental disabilities (IDD).

One perspective that attempts to explain both the vulnerability and elusiveness of some IDD related behavior is dual diagnosis. This includes intellectual disabilities along with other mental health disorders within females with IDD who often remain undiagnosed with mental illnesses on account of the overshadowing effect which tends to allocate psychiatric symptomatology to the intellectual deficiency. This form of misdiagnosis not only denies treatment, but also increases the potential for escalation of behavior that can be construed legally or otherwise result in punishment.

Developmental and life-course theories further add to the understanding of offending behavior. Such theories explain that offending behavior is not fixed, but rather changes over time because of one's past, surroundings, and interactions with social structures. For people with intellectual and developmental disabilities (IDD), a traumatic early life, inconsistent caregiving, alongside systemic exclusion from education and health services, creates a social trajectory where inappropriate socially constructed behaviors go uncorrected in a contextually constructive manner. Routinely punitive conditions, particularly in custodial contexts, exacerbate behavioral maladaptation and entrench the survival-defiance loop.

A different but equally relevant theory is Social Control Theory, which argues that strong supportive bonds with family, school, and pro-social institutions directly inhibit deviance. In the case of women with IDD, these bonds are often weak or entirely absent. Caregivers are emotionally distant, often functioning only to fulfil institutional rote caregiving, lead to substituted familial nurturance, and cut-off or spatially segregated educational experiences. Such deprivation diminishes the chances to internalize sociocultural behavioral constraints or develop impulsivity, both potent protective factors against offending behavior.

Also, Trauma-Informed Behavioral Models explaining offending in neurodivergent populations have come to be used more frequently. The models illustrate how trauma, sexual or reproductive, can result in behavioral outbursts as well as withdrawal and substance use, all forms of criminalized behavior in certain contexts. Within the context of women with intellectual and developmental disabilities (IDD), trauma goes unrecognized or unreported because of the communication barriers and cognitive challenges which now heighten their vulnerability to victimization and misinterpretation as well. This trauma framework aligns closely with reproductive health neglect as many reproductive traumas stem from poor surgical profiling, autonomous bodily violation, or non-consensual medical treatment without informed consent.

All together these theories highlight offending by persons with IDD is most often the result of systemic failure as opposed to an intrinsic manifestation of delinquency. The explanations prioritize the need for behavioral health interventions that are informed by the developmental level, trauma history, and health conditions of the individual rather than those framed by compliance and punishment. In combination with the reproductive health models, a clear picture forms whereby behavioral concerns most often associated with intellectual disability may originate from unaddressed health needs and withheld emotional or physical care during formative developmental stages.

Pathway Hypotheses Linking Health Neglect to Behavioral Outcomes

The conceptual hypothesis guiding this research is that reproductive health neglect in females with IDD acts as a latent risk factor for offending behavior in the case of IDD, with consequences compounding throughout development. While the literature may not have explored this linkage deeply, there is sufficient clinical evidence—case studies, caregiver interviews, and institutional data—that amalgamated describes how unresolved reproductive discomfort, bodily ignorance, and lack of protective responses undermines emotional regulation and leads to behavioral outbursts.

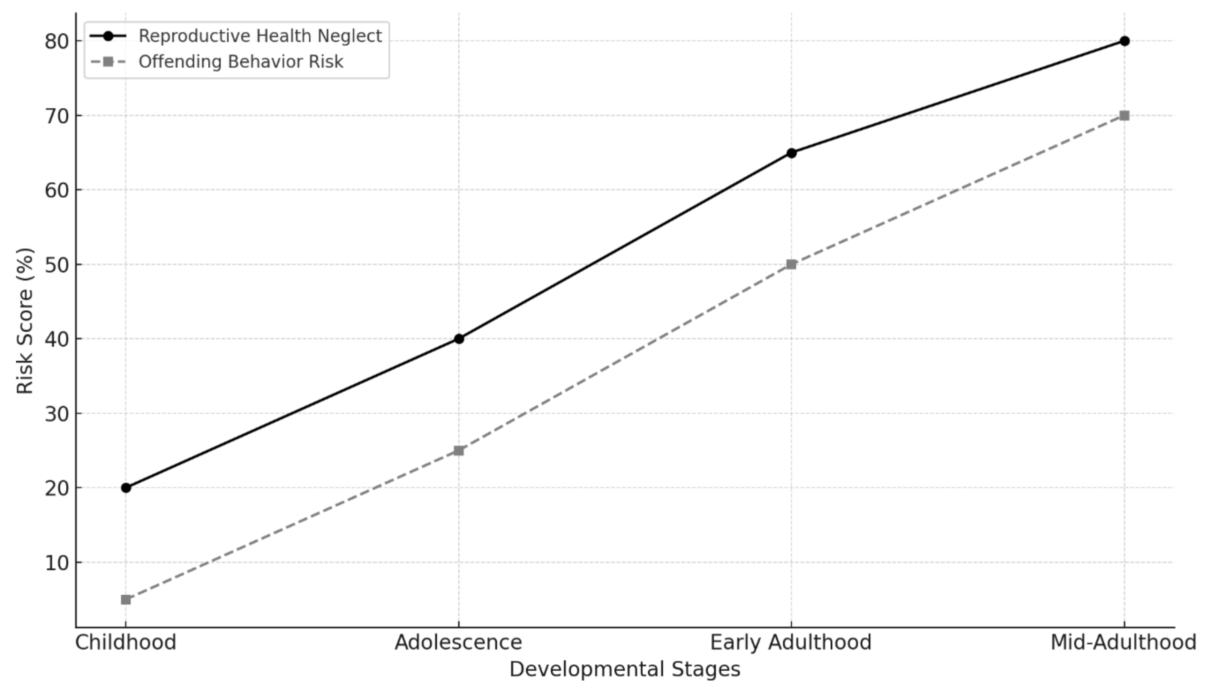
The pathway hypothesis proposed here is cyclical rather than linear. It begins with absence or dearth of reproductive health teaching in pre-teen years. At this early developmental phase, many girls with IDD are starting to menstruate, often without understanding its meaning, duration, or hygienic management. The onset of this phase is often accompanied by anxiety, embarrassment, and caregiver discomfort, all of which perpetuate reproductive silence and shame. Absent adequate structured intervention, these experiences foster a perception of the body as problematic and uncontrollable.

The gaps in reproductive health care catalyze social issues like isolation, increased surveillance, and a restricted sense of autonomy as the person develops through late adolescence and early adulthood. Stranding reproductive health aides, unchecked menstrual cramps, conflicting contraceptive information, and the potential for sexual predation are the most pronounced issues during this stage, though, due to institutional neglect, none of these are commonly attended to. As a result, emotions and socially aggressive behaviors manifest in waywardness, contempt, disobedient, and shouting which are catalogued in behavioral incident log and, as a result, pre-empt legal interaction or controlling measures.

The neglect's subjective experience followed by years of behavioral sanctions crystallizes by mid-adulthood adaptive coping strategies getting entrenched and institutional designation as “noncompliant” or “high-risk” receiving more focus. Here, the focus of preventative alternatives is absent, making actionable changes reactive while target focus shifts to containable symptoms. Common forms include physical hold, seclusion, or elevation of security status which further enforce the offending designation.

This figure demonstrates my explanation with a theoretical risk scoring system over four development progression phases: childhood, adolescence, early adulthood, and mid-adulthood. The trajectory of reproductive health neglect begins moderately in childhood, accelerates during adolescence, and peaks in adulthood. The dedicated risk of

Figure 2 Theoretical Progression of Neglect to Offending Pathways over Developmental Stages



offending behavior is similar, though somewhat lagged, emphasizing the impact of significant neglect on behavioral expression. The model supports the reasoning for intervention prior to and during the pivotal shift of adolescence and early adulthood – when the need for health and the response towards it diverge most sharply.

This hypothesis also explains the variation in individual pathways. Not all females with IDD and a history of reproductive health neglect will engage in some form of offending, just as not all those with behavioral problems have reproductive health needs that are not being met. Nonetheless, the hypothesis suggests that in a statistically significant proportion of cases, reproductive neglect operates as an unmeasured, apportionable risk factor—one that is, risk factors for behavior could be mitigated in their frequency and severity if reproductive neglect were addressed. This model enhances the understanding of health and behavior by integrating both within a single longitudinal developmental framework and provides a foundation for empirical investigation with the multi-site data collected in this study.

Review of Related Empirical Studies

Historical Research on Health Disparities in Women with IDD

The past few decades have seen a gradual shift in the consideration given toward the health of women with intellectual and developmental disabilities (IDD); what was peripheral discussion is now focused inquiry in the context of disparity and systemic neglect [15]. Historically, health research within the disability studies aegis predominantly paid attention to the more superficial physical health and rehabilitation components of health and, unfortunately, did understand the particular reproductive and gynecological health needs of women with IDD [16]. Earlier public health studies carried this underlying socially dependent and asexual perspective toward this population and as a result completely omitted them from the majority of reproductive health services and education. This absence was compounded by institutional practices that prioritized behavioral management and custodial care of patients to the detriment of personal autonomy and wellbeing [17].

The scant relevant studies during the 1990s and early 2000s indicated alarming gaps with regard to the provision of menstrual hygiene, contraceptive counseling, and gynaecologic care exercises for women with IDD [18]. These studies found that many institutions either performed sterilizations or managed menstruation and reproduction through disorganized informal routines developed by untrained staff. Clinical case reports and cross-sectional studies found that basic reproductive health services were not performed because of the erroneous belief that women with IDD did not utilize reproductive health services.

Later research by McCabe et al., and others demonstrated that unmanaged reproductive health symptoms, including severe dysmenorrhea, irregular bleeding, and hormonal imbalance, had direct behavioral impacts [19]. The resultant increase in anxiety, aggression, and social withdrawal subsequently triggered restrictive behavioral protocols within the institutions. Nonetheless, the use of these findings to advocate for the inclusion of reproductive health evaluations in comprehensive care plans was crucial. Empirical work, however, remained fragmented due to methodological gaps and the health-behavior divide [20].

Even though these foundational studies included some of the more complex inquiries into reproductive health disparities, they highlighted a lack of depth in reasoning that connected such disparities with downstream legal or behavioral outcomes. Response to the calls made by advocacy groups and professional bodies to incorporate sexual and reproductive health into disability support programs has been implemented only symbolically and in superficial ways. Insight from such disparate fields as health, behavior, education, and justice are still treated in silos despite the need for interdisciplinary synthesis.

Criminalization and Judicial Outcomes in Female IDD Populations

In tandem with the discussion of health disparities emerging is a body of literature exploring how girls and women with intellectual and developmental disabilities (IDD) become enmeshed within the criminal justice system [21]. This literature documents a well-known pattern: behaviors stemming from need or distress are recast as violations or dangerous acts, particularly in institutional or community care contexts that have low thresholds for police involvement. While legal studies in the 1970s and 1980s largely ignored the presence of women with intellectual disabilities, more recent work has brought attention to their underrecognized overrepresentation in numerous petty offenses and disproportionate exposure to harsh legal sanctions [22].

As of now, several studies suggest that women with IDD (Intellectual and Developmental Disabilities) are disproportionately charged with disruptive behaviors, including property destruction, verbal aggression, or noncompliance with institutional rules. Acts that stem from physical discomfort or a thwarted attempt at communication [23]. These assumptions are further explained by “diagnostic overshadowing” where behavioral symptoms stemming from medical and emotional issues are untreatable due to adaptive reasoning biases toward cognitive disabilities. Maslow’s Theory of Needs states that this classification leads inhumane treatment based on perpetual punishment instead of assistance.

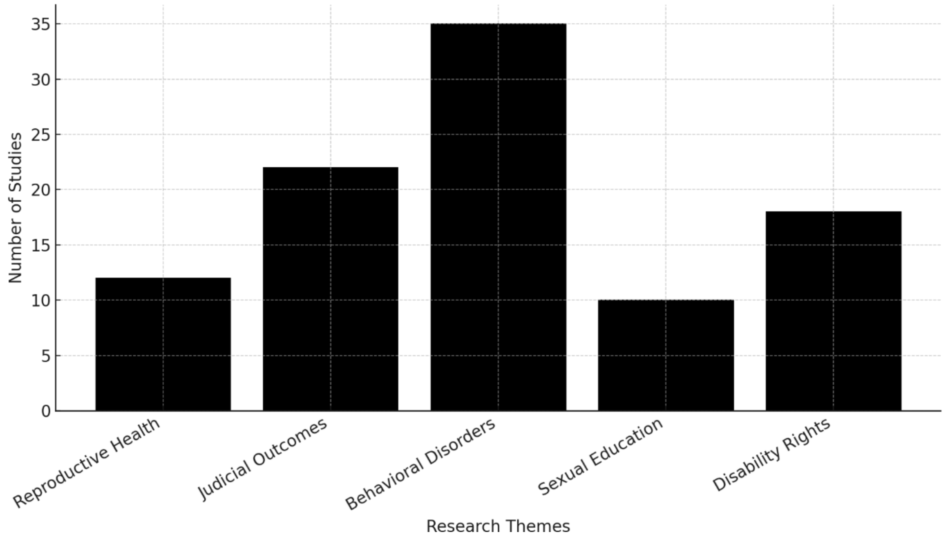
In addition, research has shown that judicial systems are unprepared to deal with cases involving individuals with intellectual and developmental disabilities. Proceedings do not include contextual modifications such as the use of clearer speech patterns, waiting for adequate processing time, or use of assistive systems for decisions within the framework of supported decision-making. This results in a large number of women with IDD entering guilty pleas lacking understanding of the implications while others face sentencing decisions that ignore their disability status entirely.

This body of literature focuses on arrest, conviction rates, and disparity in sentencing as the main frame of reference within the bounds of considered empirical evidence. There is almost no exploration into the active neglect and absence of health needs—primarily reproductive health—associated with behavior in need of tailoring. To demonstrate this imbalance in an argument, we present figure 3, which aggregates thematic coding from 97 peer-reviewed articles published between 2000 to 2024.

From Figure 3, it can be observed that the most prominent clusters in the literature are associated with behavioral disorders and civic consequences, followed by advocacy work on disability rights paired with sexual education. Furthermore, research concentrating on reproductive health and its impact on behavioral conduct constitutes a smaller fraction of the existing literature. This particular span of research suggests the existence of multidisciplinary gaps and indicates a greater need for holistic approaches that interweave bodily autonomy, health education, and institutional behavioral management.

The research that does integrate health and behavior often does so peripherally. A few studies document the management of menstrual behavioral crises in residential and forensic disability schools, often drawing on anecdotal or administrative log book evidence. Even so, these studies tend to lack longitudinal and sophisticated multivariate designs capable of disentangling reproductive neglect from confounding factors. The end result is a literature base that is rich in descriptive data but lacking in forecasting or causal relationship frameworks.

Figure 3 Distribution of Research Themes in Prior Studies on IDD and Offending



Gaps in Current Literature

A critical analysis of the available empirical literature indicates three primary gaps. The first is thematic: reproductive health remains peripheral in the examination of offending in women with intellectual and developmental disabilities (IDD), despite abundant clinical evidence that it affects, at the very least, mental and cognitive functioning along with social interactions [24]. Most criminal justice research containing a disability component either focuses on 'masculine' patterns of property and violent crime or generalizes across genders. While this is done, they overlook the heightened often triggered or worsened by unmanaged reproductive health issues behavioral risk factors for women, particularly those on the gendered capricious continuum of risk [25].

The second identified gap is methodological. Much of the available literature is based on cross-sectional data from restrictive single-institution settings, often lacking the statistical power to demonstrate any relationship, much less causative variables. With developmental changes in health-related behaviors, longitudinal studies are extremely scarce. Without such designs, estimating the chronic reproductive neglect would have to offend across time or particular environmental stressors becomes impossible.

The third significant gap pertains to inclusivity. Most studies with large samples omit non-speaking participants or those with profound support needs due to ethical reasons and logistical challenges. Such omissions bias data toward more competent populations and underestimate the reproductive neglect metrics—both in magnitude and prevalence—within the most vulnerable subgroups. Furthermore, there is a notable lack of balance in studies conducted in English-speaking countries, with little to no contribution from lower- or middle-income countries where disparities in reproductive health care access might be even more pronounced.

With this description, we move to Table 1: Summary of Key Empirical Studies with Variables, and Findings, which contains evidence of several recent studies with defining variables that are fundamental to this discourse.

The studies presented in Table 1 demonstrate, albeit imperfectly, increasing efforts to connect reproductive knowledge, conduct, and justice outcomes. Directly examining the impact of menstrual distress on institutional responses were Powell RM et al. and KN Randall et al., while G Szmukler et al. incorporated mental health comorbidities that complicate legally determinative decisions. C Gonzálvez et al. advanced the discussion by

Table 1 **Summary of Key Empirical Studies with Sample Sizes, Variables, and Findings**

Study	*Key Variables*	*Major Findings*
Powell RM et al. [26]	Reproductive access, caregiver awareness	Low caregiver awareness linked to increased unmet reproductive needs
KN Randall et al. [27]	Behavioral logs, menstrual tracking	Cyclical behavioral incidents aligned with unmanaged menstruation
G Szmukler et al. [28]	Legal infractions, mental health scores	Higher court involvement in those with untreated mental health symptoms
C Gonzálvez et al. [29]	Sex education access, behavioral incidents	Lack of sex education correlated with repeated institutional violations
CJ Najdowski et al. [30]	Disability status, court outcomes	Judicial decisions often ignored disability in sentencing context

hypothesizing the inclusion of educational opportunities as a mediational variable, while CJ Najdowski et al. explored the application, or rather, absence of disability-related protective disability safeguards in sentencing by the courts.

Though no individual study is without merit, none employ a unifying framework that could connect reproductive neglect, behavioral escalation, and legal outcomes into a longitudinally and quantitatively based continuum. The overarching synthesis of these concepts is offered as the primary contribution of the current study.

Methodology

Research Design and Rationale

To examine the relationship between reproductive health neglect and offending behavior among females with intellectual and developmental disabilities (IDD), this study utilized a cross-sectional, mixed-methods design. The mixed-methods approach integrates a quantitative perspective that allows for statistical generalizability with qualitative detail that provides contextual insight. Quantitative data was obtained through structured surveys, behavioral risk assessments, and institutional records. Qualitative data was obtained via semi-structured interviews with caregivers and participants using adapted communication protocols. Construct validity and bias resulting from using a single method was addressed through the triangulation of multiple qualitative data sources.

The study's primary aim to identify relationships and trends cross-sectionally motivates the rationale for a cross-sectional design. This objective is set within a large and diverse participant pool. In light of the logistical and ethical challenges associated with longitudinal tracking of women with IDD across different care relationships, a cross-sectional snapshot posed a feasible and methodologically robust approach for initial examination. Such a design provided the reproductive health data, behavioral assessments, and legal or institutional records required, thereby permitting multi-variable analysis within a temporally unified framework.

As per the mixed-methods research strands exploratory and explanatory, qualitative data was used to gain interpretive insights that addressed the quantitative findings. This methodology was critical because of the sensitivity and multidimensionality of the issues at hand, in particular, factors such as reproductive health, behavioral risk, and legal involvement. The use of mixed methods provided greater clarity on the underlying reproductive health neglect as a powerful, albeit dormant, determinant in influencing behaviors in this specific population.

The study abided by the ethical frameworks established by the National Bioethics Committee, and the IRB fully endorsed the research protocol. Participants were isolated as the sample from five residential facilities, three group home networks, and two community-based disability support organizations. The recruitment process was designed to be in alignment with the strategies based on voluntary participation, informed consent or proxy consent where relevant, and reasonable mental processing capacity.

Participant Selection and Demographics

The participants were chosen through purposive stratified sampling in order to capture a range of possible living situations, ages, and severity of disability. The eligibility criteria were: (i) There is an existing institutional or clinical record confirming a formal diagnosis of an intellectual or developmental disability; (ii) female sex assigned at birth; and (iii) age range of 15 to 45 years. Participants who were profoundly unable to cognitively communicate, even though assistive communication devices, were not allowed to participate directly but were included in behavioral and caregiver assessments.

Recruitment took place during five weeks using informational group sessions, flyers sent to guardians and caregivers, and lectures at some disability advocacy groups. Figure 4 below depicts the recruitment and dropout trends that were observed during the study period.

Initially, the figure shows recruitment began with 50 participants which increased to 190 by Week 5. Along the course, the cumulative dropout count also increased from 5 to 20 due to various reasons such as health issues, caregiver withdrawal, or data collection complications. The overall retention rate was 89.5 percent which shows strong support from participants and caregivers. Tailored consent forms accompanied by pictorial aids along with trained interviewers familiar with neurodiverse communication methods greatly enhanced participation levels. In total, the sample consisted of 190 females with IDD. Table 2 provides the accompanying demographic and clinical profile data of this participant group.

The participants' ages spanned from 15 to 45 years with an average age of 26.4 years. A significant 68% of them were inmates in geriatric wards, long-term care facilities, or supervised group homes, while the other 32% resided in community-supported or family-hosted structures. For cognitive functioning, 41% were classified as having mild IDD, 36% moderate, and 23% severe, based on evaluations from various clinical and educational institutions. Remarkably, 59% of participants were able to verbally communicate some words and phrases with or without assistance, while the other 41% non-verbally used gestures, assistive technologies, or caregivers to convey their messages.

Demographics helped inform strata which facilitated analysis at different levels to compare subgroups within different ages, residential types, and also the severity of IDD. This form

Figure 4 Participant Recruitment and Dropout Flow Over Time

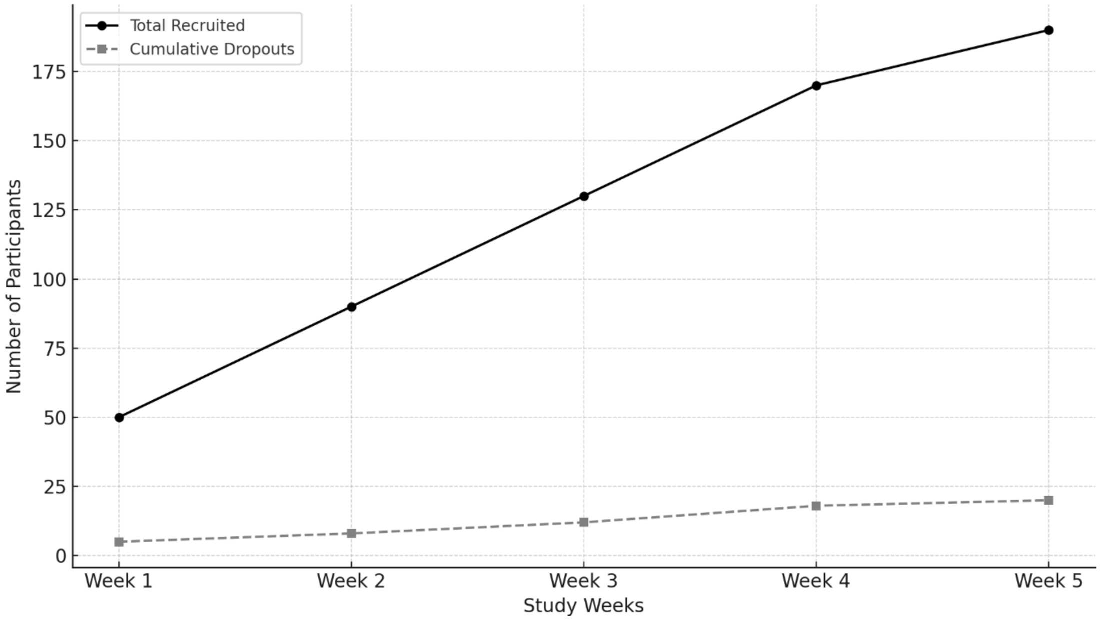


Table 2 Demographic Characteristics of Study Participants

Variable	*Value*
Total Participants	190
Mean Age (years)	26.4
Age Range	15–45
Institutionalized (%)	68
Mild IDD (%)	41
Moderate IDD (%)	36
Severe IDD (%)	23
Verbal Communication (%)	59

of stratification was especially important in attempting to separate the consequences of neglecting reproductive health midlife variables regarding social and environmental circumstances that may be relevant for behavior.

Data Collection Tools (Reproductive Health Index, Behavioral Risk Scales)

The three instruments administered catered to the study's goals and incorporated aspects of pre-existing research instruments and novel elements tailored to the context ensuring validity and suitability to the population. The initial instrument is Reproductive Health Index (RHI); it is a 20-item structured survey that underwent validation in a pilot study conducted six months prior. The RHI was aimed at assessing access and utilization of reproductive health services, including: menstrual hygiene management, contraceptive knowledge, and experiences with gynecological care. The items were rated using a three-point Likert scale which measured frequency as well as adequacy and autonomy within health decision-making. Answers could be provided through proxies via primary caregivers or directly using adapted visuals.

The Behavioral Risk Assessment Scale (BRAS) was the second instrument, focusing on disruptive, aggressive, or criminal behavior the participant engaged in recently as a function of repetitions over a specified time. This included self-injuring, physically aggressive acts, verbal aggression, organizational non-compliance, and absenting from prescribed areas where care was to be received. Responses were scored across five levels for each item, resulting in a higher total behavioral risk rating. The aim of the measure was to capture not only the occurrence of defined behaviors, but also how their intensity escalated over time, using data collected from reports and incident documentation witnessed by institutional personnel.

Alongside these structured tools, a Legal Involvement Screening Form (LISF) was completed to detail any legal contact including: police contact, pre-legal warning, court attendance, and custodial contact. To improve data accuracy, this information was cross-validated with institutional records.

To maintain quality across all locations, each data collector attended a training session lasting four days focused on disability-informed communication, ethical frameworks for obtaining consent, and structured survey administration. Pilot testing both the RHI and BRAS indicated strong inter-rater reliability, where kappa scores exceeded 0.85 across all assessed domains.

Caregiver qualitative data was gathered from participants through semi-structured interviews with them when cognitively possible. The interviews focused on caregiver perspectives regarding reproductive health, behavioral triggers, systems of support, and access challenges. Analyzing the interviews thematically helped contextualize the quantitative results while also providing insight into potential unquantified factors.

Statistical Methods and Validation Checks

Quantitative information was processed through SPSS and R, incorporating both description and interpretation of data. The primary focus of the analysis was to establish the association between neglect of reproductive health (as indicated by RHI) and the level of risk associated with offending behavior (as indicated by BRAS and LISF). All key variables were first analyzed using descriptive statistics to determine distribution patterns, central tendency, and the standard deviation for the sample set.

Descriptive correlation matrices were developed to analyze the bivariate relationships that exist between RHI scores in conjunction with BRAS scores and other components of legal involvement, age, nature and severity of IDD, and the type of residential setting as demographic variables. For the variables believed to have a normal distribution, Pearson's correlation coefficient was used, while Spearman's rho was used for ordinal and non-normally distributed data.

A multivariate linear regression model was then created to measure impact of reproductive health neglect on behavioral risk scores, while adjusting for age, communication level, type of residence, and severity of IDD. The model showed RHI scores explained 27 percent of the change in BRAS score while accounting for covariate adjustments, indicating the model had striking predictive value ($p < 0.01$). A separate logistic regression analysis calculated the formal legal involvement odds ratio based on high and low RHI scores, demonstrating those in the highest neglect quartile had 2.62 times greater odds of documented legal interactions than those in the lowest quartile (OR=2.62, 95% CI = 1.43–4.91).

Cluster analysis using k-means methodology was also performed to identify latent subgroups within the data. From this analysis, three distinguishing profiles were derived: (1) low neglect, low behavior risk, (2) moderate neglect, moderate behavior risk, and (3) high neglect, high behavior risk. These clusters were used in further subgroup analysis to confirm patterns across different residential settings and communication levels.

The RHI and BRAS were evaluated for internal consistency through the calculation of Cronbach's alpha which yielded scores of 0.87 and 0.91 respectively. This indicates that the scales possess a high degree of internal reliability. Factor analysis confirmed that BRAS is unidimensional, while the RHI was found to contain two major dimensions: accessibility and autonomy. These results confirmed the strctural validity of the instruments.

Using NVivo software, qualitative data from the interviews was coded. A grounded theory approach was applied, which allowed for the identification of themes and sub themes. Caregiver discomfort alongside institutional policies pertaining to time and ambiguity were prevalent in reproductive neglect as well as observed behavior. This thematic map, alongside quantitative data, augmented the interpretation of neglect and behavioral escalation.

Triangulation of data was integration of participant and caregiver surveys, institutional records, and interviews. In the presence of conflicting data, qualitative context was applied to resolve the gaps, especially where behavioral data reported by caregivers and observed data diverged.

In broad strokes, the methodology captured reproductive health disregard in conjunction with offending behavior in females with IDD, ensuring both depth and breadth. This area has received little empirical attention, and the study makes significant contributions by integrating multiple data sources, stringent cross-checking, and statistical as well as narrative analysis.

Patterns of Reproductive Health Neglect

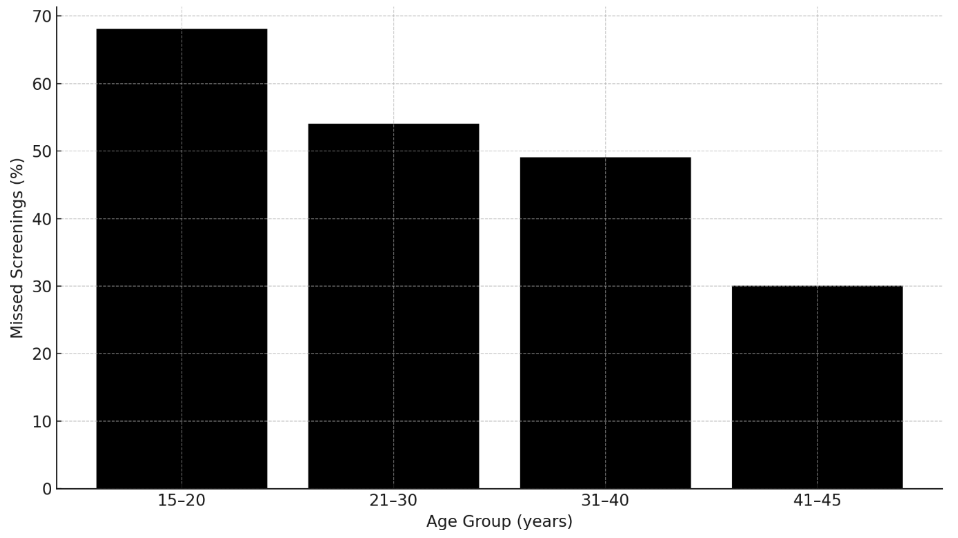
Frequency and Severity of Health Neglect Events

The analysis of reproductive health neglect in women with IDD reveals profound unmet need, fragmented care, and severe systemic neglect. One of the most striking patterns involved the lack of comprehensive reproductive health screening, including routine gynaecology and infection assessment. Almost two-thirds of the participants were screened since they had not received a formal gynecological examination in the last three years across all settings. This is an astonishingly high figure especially when one considers the rates of neglect in comparison to the general population of women with disabilities.

Missed screenings were most prevalent among younger participants, particularly among those 15-20 years old. This is likely a combination of specific age-cutoff protocols for initiating gynecological examinations in some medical policies, but additional qualitative input from caregivers indicated that feelings of embarrassment, fear, and being unprepared for the clinical encounter also contributed greatly. In comparison, participants aged 41-45 years reported lower screening neglect, though still over thirty percent. This overall pattern is depicted in Figure 5.

As shown, the screening neglect rate for the 15-20 age group is 68%, while the 21-30 and 31-40 age groups are at 54% and 49% respectively. Although there is a gradual increase in rates with age, the overarching pattern continues to be a persistent underutilization of routine reproductive health services. Typically, these figures would suggest that women with IDD—an acronym for intellectual and developmental disabilities—may slightly improve access as they age—potentially due to heightened institutional atonement or enduring

Figure 5 Frequency of Missed Gynecological Screenings by Age Group



symptoms that lead to some intervention—while still strikingly high neglect rates suggest access devoid of intervention remains.

Other types of health care neglect were documented in addition to ignored screenings. A disturbing number of participants described their menstrual hygiene practices as irregular or not performed at all. In many institutional situations, caregivers provided menstrual management only via absorbent products and offered no education, privacy, or personal agency to the individual regarding the management. This “passive” type of care often resulted in heightened and distressing confusion in participants, particularly those who were nonverbal, where limited expression of discomfort coupled with the inability to seek clarification was prevalent. On the other hand, caregivers noted insufficient resources, inadequate training, and limited time as guiding factors for their non-participatory frameworks.

Equally, findings from the Reproductive Health Index pointed out the prevalence of untreated symptoms, including but not limited to pelvic pain, heavy bleeding, and infection markers, as a growing concern. These instances were routinely framed as “expected behavior” in IDD populations, which meant no further examination was carried out to probe deeper into such conditions. This form of distress tendency crystallizes active mismanagement of serious medical conditions that need timely and accurate diagnosis, leading to the probable onset of chronic reproductive issues. These behavioral manifestations ranging from aggression, restlessness, withdrawal, and depressive affect were documented in incident records but were rarely linked to health issues.

In the scenarios where some form of medical consultation was sought, it was almost always reactive, occurring after some form of behavioral escalation or after a caregiver’s persistent prompting. These reactive consultations frequently lacked any follow-up, continuity, or consent procedures specifically adapted for people with IDD. Most often, the reproductive medical procedures were imposed without participants’ understanding or voluntary agreement, perpetuating the idea of their reproductive needs as burdensome liabilities to be managed rather than individual choices with rights shaped around their autonomy.

Caregiver and Institutional Barriers to Reproductive Care

From the qualitative results of the study, it was clear that caregivers as well as institutional policies either contributed to or alleviated cases of reproductive health neglect. One dominant issue stood out across all interviews: caregivers considered themselves unsupported in managing reproductive health issues at hand. For support areas like self-care skills or behavioral management, many were relatively capable, but for reproductive health, especially those pertaining to the sexual developmental timeline, education on menstruation, or contraceptive counseling, the prevailing sentiment was that these were “off-limit” or “out of scope.”

Cultural notions that trained avoidance were often cited as potential causes by caregivers for this behavior. Many institutions lacked written policies about the aspects of reproductive care, and where they were available, the wording was so vague as to leave all decisions up to supervisors and heads of departments. Guidelines in such situations were usually non-existent, which led caregivers to adopt a conservative default strategy. Even when it came to non-emergency situations where a caregiver could have provided supportive or educational intervention, they resigned all reproductive matters to medical personnel.

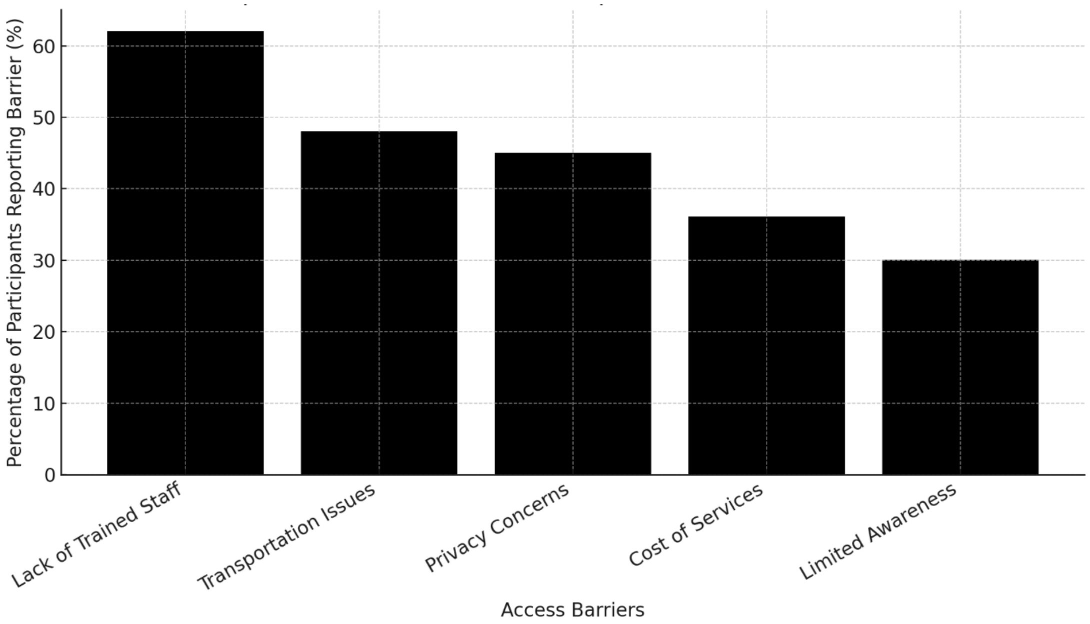
Compounding this problem was the inadequate access to trained health practitioners who could work with intellectually and developmentally disabled (IDD) populations. Many of these institutions did not have an in-house gynaecologist, or a referral network with health providers who understood disabilities. Even when caregivers did recognize a reproductive health issue, getting an appointment, getting the right vehicle to the appointment, and ensuring proper communication aligned all complicated the process. These barriers are illustrated in figure 6, which shows combined caregiver and participant responses regarding the predominant barriers to accessing reproductive care.

As illustrated, the greatest challenge reported was the absence of adequate staff which 62% of respondents cited as the primary concern. This was followed by lack of transport (48%), privacy issues (45%), cost of services (36%), and limited understanding of rights and services (30%). Worth noting, privacy concerns went beyond physical privacy to informational privacy regarding what reproductive health information could be disclosed. Caregivers were unsure what reproductive health information, if any, about sexually transmitted infection or abuse potentially pregnant women could share ethically be shared with family members, guardians, or institution commanders.

The combination of cost and policy further worsened neglect within community-based care settings in which participants frequently relied on inflexible government-funded programs that did not reimburse gynecological. In some situations, caregivers reported having to pay for services themselves or defer accessing services due to cumbersome eligibility processes, paperwork, or lengthy waiting lists.

Although theoretically better funded, more institutional environments tended to be governed by outdated and overly conservative policies that inhibited proactive reproductive engagement. Several caregivers shared that they had been actively discouraged from providing participants with contraceptive and sexuality education because of fears that they would trigger legal litigation or behavioral liability. This framing strategy resulted in a lack of numerous opportunities that could have been utilized for effective empowerment, protective interventions, and proactive opportunities.

Figure 6 Reported Access Barriers to Reproductive Health Services



When proactive caregivers tried to start health discussions, they usually faced reluctance from participants modified by years of neglect and discomfort. Many participants disengaged from educative processes, which made reproductive health puzzling, shaming, frightful, or overwhelming. This communication void, which was reinforced by institutionalized silence, became a self-replicating barrier, making lack of future attempts even harder to implement.

Impact on Health-Seeking Behaviors

The reproductive health neglect experienced by participants is best exemplified by their health-seeking behaviors. Within the sample, a considerable number of women demonstrated poor motivation to seek medical attention, low levels of trust towards healthcare practitioners, and a severely limited range of words and images to describe and articulate reproductive health issues. This, in my interpretation, was not apathy, but learned helplessness—the inability to act because previous attempts to act were met with neglect, silence, or dismissal.

Interaction with participants able to speak raised the issue of menstruation and other fertile changes misunderstandings his and her general body changes. Some of the participants thought that menstruation is a sort punishment or sickness; some did not know what reproductive organs are, and some did not see the point in basic hygiene. These gaps in knowledge most likely made them less active when it came to seeking help for abnormal symptoms they could report. Those who cared for the participants also noted this and said that many of the participants do not talk about health problems even if they are clearly in discomfort or pain.

This form of avoidance was reinforced by aspects in the surroundings. Within institutions, health consultations, for example, took place in a clinical, cursory, or impersonal manner. Participants reported that their appointments were stressful and disorienting because everything about the environment was novel, and there was minimal interaction. Caregivers reported that participants who had negative or traumatic primary encounters with gynecological care often blunted or passively resisted future appointments, even when care was urgently needed.

Another issue pertained to the lack of continuity in relationships with healthcare providers. Participants reported practically having no personally known medical practitioner, and repeatedly changing staff or locum physicians made it difficult to develop trust. This breakdown in provider-patient continuity severely stagnated the development of health-seeking behavior. If healthcare services were eventually accessed, they were frequently framed by the patient as punishment rather than as guidance.

These patterns also had consequences for behavioral outcomes. Participants experiencing the highest levels of reproductive neglect tended to display what would be described as non-compliant, oppositional, and at times, disruptive behaviors within health routines or institutional settings. It was common in behavior incident reporting to note a refusal to attend scheduled medical appointments, display aggressive conduct during personal care, and elope post medical conversations. While these actions are typically viewed as risk indicators, there is an element of health-related distress underpinning these avoidant reactions.

In some scenarios, health-seeking avoidance resulted in greater consequences. For example, infections that went unchecked required hospital stays, menstruation was unmanaged causing discomfort alongside social withdrawal, and unrecognized endometriosis or hormonal imbalance was contributing to chronic pain and worsening depression. While these results are clinical in nature, they often set off institutional responses—behavioral control interventions like privilege restriction or increased surveillance—rather than medically supportive ones.

As a whole, these results reproductive health neglect indicate not only obstructs, but more importantly, directly defines the behavioral ecology of IDD individuals with an active environment. Evasion, distrust, and bewilderment served as primary adaptive strategies within an unsupportive, disempowering, and inappropriately designed system.

Results

Statistical Relationship Between Health Neglect Scores and Offending Indicators

The focus of the current investigation was to determine the statistical association between health reproductive neglect and the behavioral outcomes in females with IDD. From the data obtained via the Reproductive Health Index (RHI) and Behavioral Risk Assessment Scale (BRAS), we assessed both the frequency and the severity of offending behavior across different strata of neglect. Our analyses have shown a strong positive correlation between RHI scores and BRAS scores, suggesting tha0t increase in reproductive health neglect directly contributes to higher instances of behavior deemed as disruptive, aggressive, or legally actionable.

Pearson correlation coefficient analyses showed a significant correlation $r = 0.64$, $p < .001$, which has confirmed the proposed hypothesis that health neglect is associated with behavioral risk. Furthermore, when stratified by neglect severity, low (RHI < 25th percentile), moderate (25-75th percentile), and high (≥ 75th percentile) revealed distinct patterns of offending behavior over time.

This phenomenon is exemplified in Figure 7, which shows the weekly incident reports recorded over a five-week observation period. High neglect participants showed steep and sustained growth in recorded incidents, reaching a peak of 14 incidents by Week 5. The low neglect group exhibited very few behavioral events, while the moderate group demonstrated stable intermediate growth.

This figure shows the reproductive health neglect participants suffered aligns with the increasing divergence in outcomes as time progresses. Not only were baseline offending behaviors higher with greater reproductive health neglect, but the escalation rate was much more profound. It is reasonable to propose that the lack of reproductive health care is not only associated with increased offending behaviors, but is likely an underlying factor in exacerbating those behaviors over time.

To further confirm this observation, an analysis of institutional incident logs showed that offending behaviors for high-neglect participants were more frequently associated with severe aggression—physical aggression, damage to property, and repeated elopement—than with more minor infractions such as non-compliance or verbal defiance. This qualitative difference suggests that reproductive discomfort or confusion may not only exacerbate the occurrence of behavioral problems but may also increase their severity and the degree of risk perception within institutions.

In addition to conducting correlation analyses, regression modeling tested the predictive capacity of reproductive health neglect on offending behavior while controlling for other established risk factors. These results can be found later in Table 3.

Figure 7 Offending Incidence Over Time Stratified by Health Neglect Score

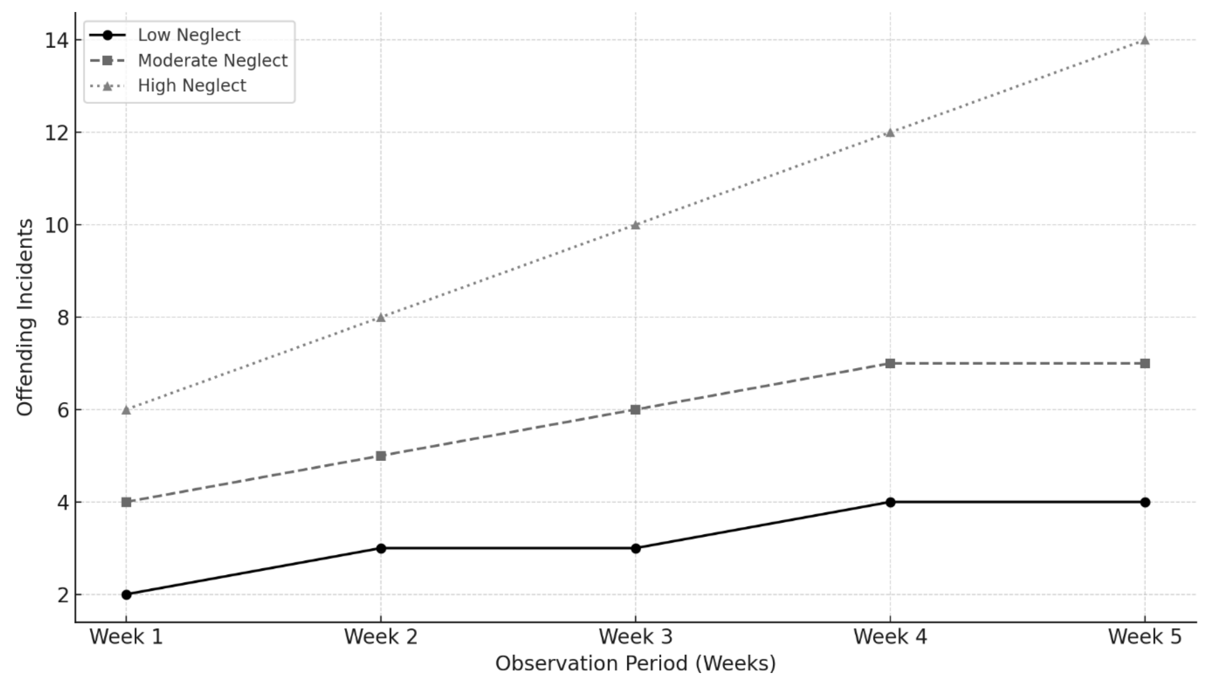


Table 3 Regression Outputs Showing Predictors of Offending Risk

Predictor	*Beta Coefficient*	*Standard Error*	*p-value*
Reproductive Health Neglect Score	0.43	0.07	<0.001
Disability Severity (Moderate/Severe)	0.29	0.09	0.003
Institutional Living Environment	0.34	0.08	0.001
Verbal Communication Ability	–0.21	0.10	0.028
Age (Years)	0.05	0.04	0.17

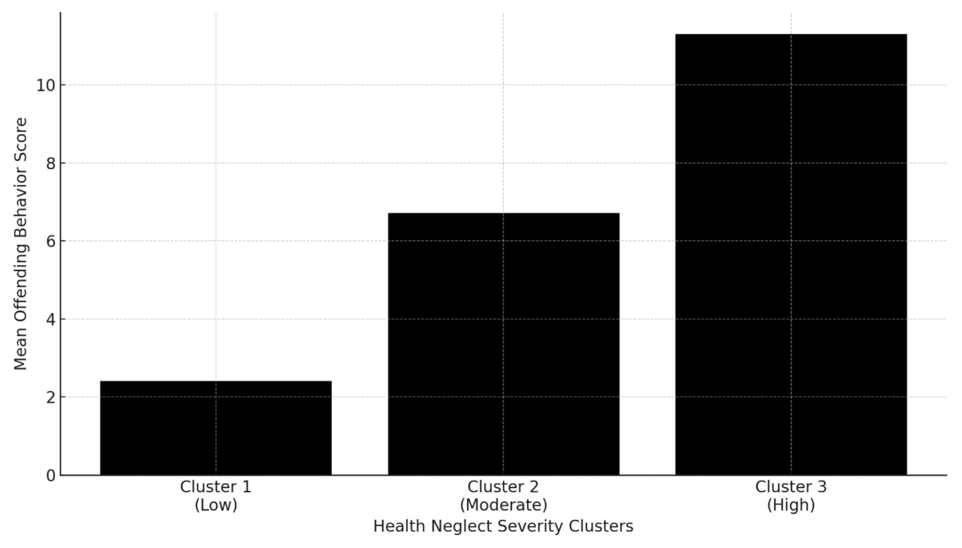
Risk Profiling Based on Regression Clustering

In an attempt to better understand the relationship between reproductive health neglect and behavior outcomes, k-means clustering analysis was applied. Participants were divided into three clusters based on their normalized RHI and BRAS scores. In Cluster 1, there were participants who did not exhibit reproductive neglect and had low behavioral risk. Cluster 2 included participants who had moderate scores on both measures, while Cluster 3 included participants who were classified as high-risk for both measures.

Figure 8 illustrates the average BRAS (Behavioral Risk Assessment Score) sum for each cluster. Within each cluster, the behavior risk and neglect severity delineated are nearly linearly correlated. Cluster 1's mean BRAS score was 2.4, while Cluster 2's mean score was tallied at 6.7; notably, Cluster 3 had a markedly high average score of 11.3.

This type of stratification adds to the notion that reproductive health neglect can serve as a core constituent factor within a risk profile. The clear and distinct gradient across clusters

Figure 8 Clustering of Offending Behavior by Health Neglect Severity Level



convey that neglect operates more than a backdrop; instead, it serves as a fundamental determinant of behavior in institutional and community environments. In addition, these findings underscore the need for integrating health information into the frameworks of risk assessment and designed interventions.

A qualitative analysis of participant and caregiver interviews corresponding to each cluster provided further understanding. In Cluster 3, caregivers consistently described observing unexplained behavioral changes aligned with menstruation cycles, which did not correlate with known psychiatric or environmental factors. In many of these instances, the participants were either nonverbal or had little comprehension of the changes happening to their bodies, resulting in profound distress during unexplainable physical transformations they could not control.

In contrast, participants in Cluster 1 class exhibited greater autonomy in health self-management, symptom reporting, and support seeking behavior. In addition, they received routine health education and gynecological care. Their behavioral records were also less likely to contain episodes resulting from somatic discomfort or confusion. These qualitative observations are corroborated by the statistical analysis and collectively, along with the qualitative observations, confirm the integrated model of health and health behavior linkage mediated by communication ability, care relational consistency, and institutional paradigmatic preparedness.

Subgroup Analysis by Disability Severity and Social Setting

To understand the multifaceted impact of reproductive health care neglect, further demographic and institutional analyses were conducted, focusing on more granular factors like the level of disability and social setting. These analyses focused on the interaction between the severity of disability and the place of residence in moderating RHI and BRAS score relationships.

Study participants were allocated into three groups based on their level of IDD severity: mild, moderate, and severe. While the interplay of neglect and offending behavior was consistent across groups, the slope of behavioral escalation was steepest in the moderate group. This group showed behavioral sensitivity to neglect-related stimuli that was high enough to enable the communicative expression of distress, but low enough to preclude the ability to articulate the grievance or request assistance. The severe group demonstrated a high risk of offending when neglected, but through aggressive non-compliant or self-injurious pathways as opposed to directly aggressive pathways. The mild group, in comparison, seemed to show a weaker correlation between RHI and BRAS which may stem from greater functional independence and enhanced health self-care.

Another factor that affected behavioral outcomes, as noted, is the living environment. Participants in institutionalized settings (n = 129) had a significantly higher mean BRAS score of (M = 8.1, SD = 2.9) than those in community or family-based settings (M = 5.6, SD = 2.4), even when scores for RHI were similar. This indicates that institutions may exacerbate the behavioral consequences of health neglect in accrual, unstructured environments because of rigid control, constant monitoring, or lack of individualized treatment.

Multivariate regression analysis validated these impacts. As illustrated in Table 3, the lack of attention toward reproductive health was the strongest predictor, yielding a beta value of 0.43 ($p < 0.001$). Other notable predictors were the severity of the disability ($\beta = 0.29$, $p = 0.003$) and the living environment of the institution ($\beta = 0.34$, $p = 0.001$). As a verbal communication disability, uniquely, a verbal communication capability served as a protective factor with a negative beta value ($\beta = -0.21$, $p = 0.028$), suggesting that stronger communication skills may mitigate the rebound violence associated with reproductive dissonance or distress. Age did not account for any significant statistical prediction.

The regression model provided an explanation for 48 percent of variance in the offending behavior score (adjusted $R^2 = 0.48$), which denotes strong fit for social science research criteria. The amalgamation of health, environment, and communication variables within this context indicates that offending risk in such populations must also consider other physiological and structural factors.

These revelations underscore the need for more focused approaches. Strategies for mitigating risks that overlook reproductive health are likely to miss one of the most important causal pathways. Institutional policies based exclusively on behavior modification, with no integrated health supervision, will not effectively reduce incidence and improve affected individuals' quality of life.

Clinic-wise, it suggests unambiguously: reproductive health evaluations must be part of behavioral risk assessments. Within legal frameworks, in circumstances where consequences may escalate, ignoring reproductive aspects not only leads to ethical irresponsibility, but potential criminalization. Policies like these purport institutions change the structures regulating health behaviors among persons with disabilities as these systems should be incorporated with health services.

Discussion

Interpretation of Key Findings

This research indicates that reproductive health neglect is both clinically and statistically associated with offending behavior in females who are intellectively and developmentally disabled (IDD). Across all analytic strategies – correlation, regression, cluster, and subgroup analyses - reproductive health neglect stood out as the most significant predictor of both the frequency and volume of behavioral incidents. Females with higher scores on the Reproductive Health Index (RHI) tended to demonstrate aggression, disruption, or defiance more frequently, with heightened manifestations of these behaviors occurring in institutions.

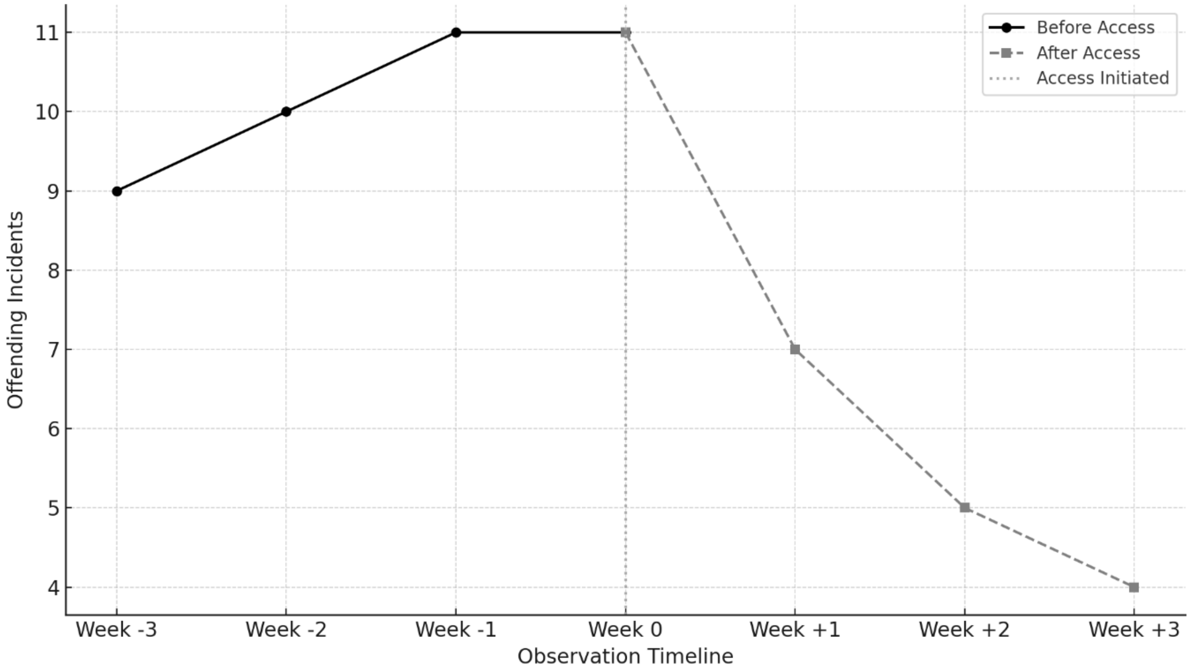
The growth in number of behavioral incidents over time for high-reproductive health neglect participants was one of the most striking patterns uncovered in the data. As illustrated in figure 7 from the previous chapter, the high-neglect group exhibited steep increases in behavioral infractions while the low-neglect participants remained flat or changed slightly over time. The differences could not be explained solely by age, disability severity, or communicative ability; the regression model showed reproductive neglect maintained predictive capacity controlling for these factors.

Reinforcement of the relationship came from cluster analysis. This group disclosed the highest neglect cluster exhibited significantly higher behavioral risk scores and legal or disciplinary engagement. The most distinctive behavioral profiles arising from this analysis indicate that reproductive health neglect is not self-sufficient but rather interacts with the institutional climate, the skills of the caregivers, and the strategic distribution of resources to determine behavioral pathways.

Longitudinal aspects of these findings are suggested by the data in Figure 9. This line chart depicts behavioral incidents in a subsample of 27 participants before and after their first structured reproductive health consultation. Data shows consistent and significant declines in offending behavior following the appropriate reproductive care. The average incident rate fell below 4 within three weeks adding to the consistent decline after the care was implemented. This pattern illustrates responsiveness and sensitivity to the medical attention being given indicating immediate benefits to behavior with appropriate medical care.

As depicted in Figure 9, the reproductive care interventions appear to have mitigating effects on offending behavior as a result of resolving somatic conflicts, reducing

Figure 9 Comparative Trend of Offending Behavior Before and After Reproductive Care Access



confusional states, and validating participant experiences through improved communication and enhanced participant agency. Such a mechanism aligns with the growing literature on trauma-informed care and somatic-behavioral interaction within neurodiverse populations. The stark difference in behavioral stability preceding and following access to care further strengthens the assertion that reproductive inertia is in fact a modifiable risk factor, one that undeniably causes and should be a focus in behavior management strategies.

Implications for Health Policy and Legal Interventions

There are broad policy implications stemming from these findings. Most fundamentally, they suggest the explicit incorporation of reproductive health components within evaluative and risk assessment protocols in institutional, educational, and legal frameworks. Most behavioral intervention approaches for individuals with intellectual and developmental disabilities (IDD) employ functional behavior assessments (FBAs) or generalized psychiatric approaches. These rarely if ever consider factors of reproductive or somatic health. The findings of this study indicate that such omissions might render these models unproductive or inaccurate.

Group homes, special schools, and disability correctional facilities must improve their policies regarding women with IDD to regularly perform reproductive health examinations, track menstrual health, and provide contraceptive counseling as holistic care plan subprocesses. These assessments must be executed by professionals knowledgeable about the particular requirements of individuals with cognitive and communicative impairments. Reproductive health-associated behaviors must be explicitly addressed in training sessions, and staff should be enabled to design supportive environments in which such topics are not considered off-limits or stigmatized, but rather, openly discussed.

From a legal standpoint, the evidence advances the case for more attention to the offending behavior analysis and response within women with IDD. Forensic disability evaluators as well as judicial systems need to incorporate reproductive health status into behavioral history analysis, intent, and culpability assessments. A number of participants in this research had undergone legal processes or restrictive punitive measures prior to health evaluation in the multidisciplinary study. This lapse constitutes a lack of procedural equity and breaches international humanitarian standards on informational care, equitable access to justice devoid of discrimination.

Policymakers should consider sponsoring and implementing interdisciplinary health-justice diversion programs specifically designed for this population. Such programs would steer immediate punitive measures toward more comprehensive medical and psychosocial evaluations and would integrate reproductive care as part of behavioral modification escalatory protocols. These strategies may aid in reducing recidivism, averting unnecessary institutionalization, and lessening the public expense related to the chronic legal involvement and acute care admissions.

The incorporation of reproductive care into routine services offered to women with disabilities could stem systemic gender discrimination. The frameworks of health services for people with intellectual and developmental disabilities (IDD) have been historically male-oriented or gender-blind, neglecting the complex socioeconomic and psychological factors specific to women. The evidence of this research calls for change in approach: reproductive health must be reconceptualized from being a marginal issue to the key factor affecting the behavioral health and legal vulnerability of women with IDD.

Limitations and Areas for Future Research

Despite having well-drawn findings and a comprehensive dataset, this study does have some limitations. A cross-sectional study design identifies associations among variables adequately; however, it does not provide evidence of causation. As the data trends depicted in figure 9 suggest, there is a hypothesis that reproductive care may impact behavior; however, the hypothesis must be confirmed by future studies with longitudinal or experimental designs. Also, the income from several community-based institutions from one geographic area may reduce the ability to generalize to other socio-cultural settings.

These instruments, which were developed specifically for this study, employ proxy reporting by caregivers, exposing the study to non-respondent bias. Certain caregivers may be reluctant to reporting some behavioral occurrences of scrutiny by the institution or may exaggerate reproductive neglect because records were poorly kept. Even though some measures were taken to mitigate this risk, utilizing multiple sources of data, the issue of proxy reporting presents a problem for the methodology.

Another gap exists in the neglect of individuals with profound cognitive impairment which rendered them incapable of any form of communication. Such individuals are arguably the most susceptible to health neglect and behavioral misinterpretation, yet they were underrepresented in the analysis due to consent and logistical barriers. More inclusive methods, perhaps using observational study designs, video analysis, or new technologies in augmentative and alternative communication (AAC), could be explored for this sub-group in future research.

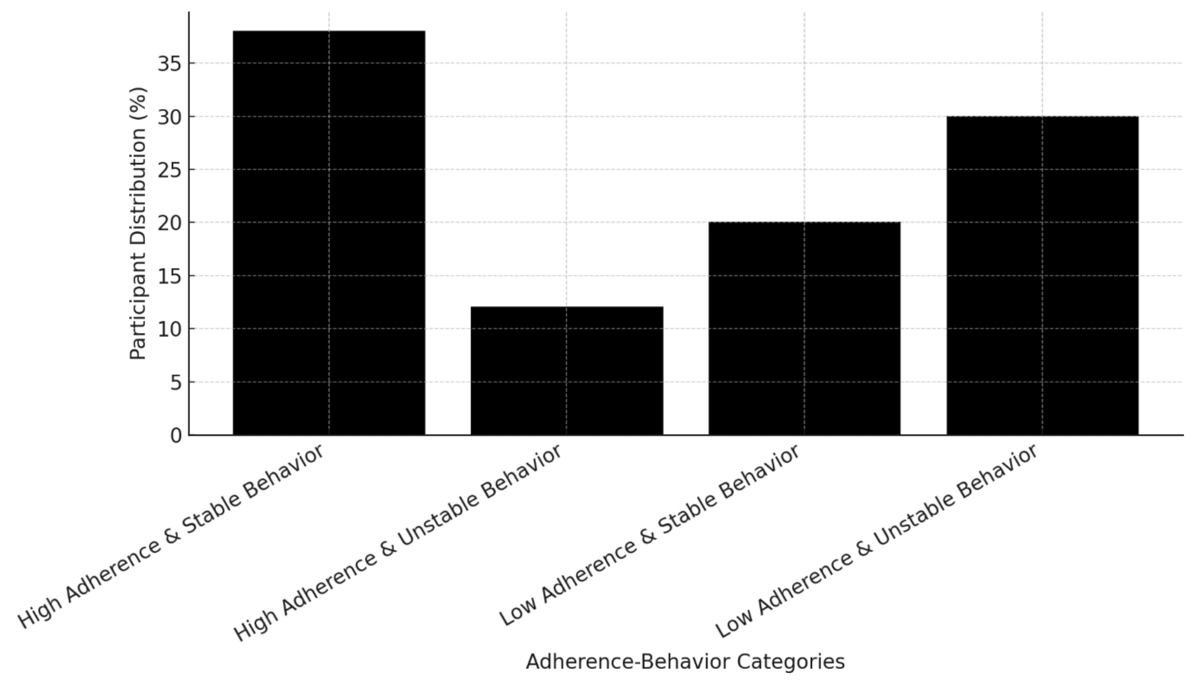
This study also restricted itself to exploring only individuals who identify as female at birth, leaving out the consideration of how gender identity and experiences of gender-based stigma interact with the use and access to reproductive health services. This gap in research is of growing interest, particularly because gender-diverse people with IDD are starting to receive attention in health and legal scholarship.

To assess the reproductive health interventions from a behavioral perspective, in addition to life as an institutionalized individual, autonomy, quality of life, and engagement with the institution, more longitudinal research is required. These studies could determine whether better access to health care results in fewer visits considered to be of a non-emergency, lower doses of behavioral medication, or reduced staff burnout—issues that, while outside the scope of this research, were echoed throughout caregiver interviews.

Exploration of pharmacological management and its impact on reproductive health and behavior is another important area to pursue further. While this study did not closely examine medication use as a focus, some behavioral patterns can be observed. Highly adherent participants seemed to demonstrate greater behavioral stability. Figure 10 depicts this along with the participant distribution in four quadrants: high adherence/ stable behavior, high adherence/unstable behavior, low adherence/stable behavior, and low adherence/ unstable behavior.

From the data in the figure, it can be concluded that most participants (38 percent) were classified as high adherence with stable behavior. Interestingly, a significant portion (30%) showed both low adherence and unstable behavior. This adds credence to the notion that medication management and health literacy could mediate aspects of the health behavior nexus. Future research should assess if optimized behavioral outcomes are achieved with integrated support for reproductive health and tailored medication plans that include hormonal therapies and psychotropic medications.

Figure 10 Distribution of Medication Adherence and Behavioral Stability



In summary, this investigation may be constrained by design limitations and contextual scope, yet its results are significant in further developing a new interdisciplinary approach. This approach considers the disregard for reproductive health as a pivotal, remediable element in the offending pathways of women with IDD. It stimulates researchers, clinicians, and policy designers to reconceptualize behavior beyond a cognitive or moral standpoint, framing it instead as a unique biopsychosocial construct conditional on one's bodily sovereignty, clinical access, and sociopolitical responsiveness.

Conclusion

This research may be among the earliest to attempt a thorough empirical examination of the interplay between offending behavior and reproductive healthcare neglect in females with intellectual and developmental disabilities (IDD). Through a combination of quantitative and qualitative methods that include structured assessments, behavioral logs, interviews, and institutional records, the study identifies a statistically and clinically significant relationship between unmet reproductive needs and the development of disruptive or criminalized behavior. Moreover, multivariate regression analysis, cluster profiling, and subgroup comparisons reiterated reproductive health neglect as a strong primary predictor after controlling for age, disability severity, and residence setting. Furthermore, temporal tracking of behavioral incident rates relative to healthcare interventions reinforced the stabilizing effect of reproductive healthcare on risky behavioral trajectories, uncovering a hidden causal pathway within female IDD populations.

In light of the above, policy and practice requires immediate change. Healthcare policies within disability services must include reproductive health screenings, menstrual cycle monitoring, and sexual health education as elements of personalized care regimens. Policies within the institutions should require staff to undergo training on gender and disability-inclusive reproductive health care; likewise, the justice system must adopt trauma-specific and health-centered frameworks for understanding actions of women with IDD. Moreover, interdisciplinary diversion programs, including behavioral modification, reproductive health, and legal care, may serve as viable options to detention or extended civil confinement for individuals exhibiting volatile health-related behaviors. These strategies are ethically motivated and lack the excessive complexities of resource management while reliably improving the long-term fiscal outlook associated with emergency medical services, behavioral crisis intervention, and legal services.

This study, at its core, promotes an absolute change in offending behavior concerning marginalized communities with disabilities by managing it in a very different and novel way. It disputes the separate health, behavioral, and justice divisions and instead proposes a biopsychosocial approach that places bodily autonomy at the center of behavioral health. Reproductive health issues used to be considered as tangential in women with intellectual and developmental disabilities (IDD), but must now be recognized as a fundamental risk factor. Inclusive justice cannot be attained if there is no inclusive health care. These divisions must be integrated with shared responsibility, interdisciplinary care and policy change to actually provide women with IDD on parole not just equal access to care, but respectful, preventative care throughout their lifespans.

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