

STD (sexually transmitted disease) or STI (sexually transmitted infection):

Should we choose?

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1. Clinical foundation of the problem

Each of the terms—“sexual(ly)”, “transmitted”, “disease”, and “infection”—is problematic independently, as this study will show. Moreover, co-occurring variants, used as synonyms in English medical articles *worldwide*, aggravate the problem. The purpose of this study is to propose a single term that can stimulate discussion about whether the co-occurring variants are clinically and linguistically justifiable—especially now, when STDs/STIs have become a global health problem, and public health agencies in every country are scrambling to educate their citizens. [Until the presentation advances to the point where the question posed in the title can be definitively answered, I’ll use the expression “STD/STI” or the terms “illness(es)” and “condition(s)”.]

The predisposing epidemiologic context will first be clarified, for it sheds light on two of the problematic terms: chiefly “transmitted” but also “sexual(ly)”. (**Section 3** discussed “infection” and “disease”.) The example that immediately follows may at first glance appear to be irrelevant, but it is essential in understanding the epidemiological context.

The Zika virus was first discovered in 1947 in a rhesus monkey in the Zika forest in Uganda. The first human case was identified in the early 1950s. For over 50 years Zika virus disease was understood to be a vector-borne disease caused by *Aedes* mosquitoes (e.g. *Ae. aegypti*). After biting a human host, the infected mosquito’s mouthparts, saturated with Zika virus, searches for blood vessels, and while drinking the host’s blood inject the virus into the host’s bloodstream.

The virus had a surprise in store: In 2008 the first documented case of sexual transmission was reported, making this the first case of sexual transmission of an infection that is typically transmitted through insects [1,2]. Since then several cases of sexual transmission of Zika have been documented. The World Health Organization (WHO) has designated Zika virus a Public Health Emergency of International Concern [1]. The U.S. Centers for Disease Control and Prevention (CDC) has published information on prevention, symptoms, complications, and treatment [3].

Another surprise: Documented incidence had shown that the two routes of sexual transmission were male-to-female and male-to-male. However, on 15 July 2016 the CDC reported the first case of suspected female-to-male sexual transmission in New York City [4]. Since 2008, then, the Zika virus has shown that it is now sexually *transmissible*. “Transmissible” denotes a potential, and is distinct from “transmitted”, which denotes a reality.

To say that Zika has proved to be *transmissible* through sexual contact means that it *can* be transmitted through sex but that it need not be (Zika remains a chiefly vector-borne disease). However, cases reported since 2008 document the reality of *transmittedness* through sexual contact.

This carefully differentiated language is used by the European Centre for Disease Prevention and Control (ECDC), which states concerning Zika: “The virus *can also be transmitted* by sexual contact with an infected male *and potentially* via transfusion or transplantation of SoHO [substances of human origin; i.e. blood, cells, tissues, organs] donated by infected donors (emphasis mine) [5].

The distinction between “transmissible” (potential) and “transmitted” (reality) is not trivial, either for Zika or other conditions. There are two reasons it is not.

First, the distinction cautions us that the term “transmission” is ambiguous: “Sexual transmission of a pathogen” can mean either that the pathogen *can* be sexually transmitted or that it *is or has been* sexually transmitted.

The distinction between transmissibility and transmittedness also alerts us to the clinical reality that transmissibility (but *not* transmittedness) is related to risk: For instance, persons who are at risk of contracting STDs/STIs are sexually active individuals who are not practicing safe sex. Moreover, an “infected person” is carrying the infective agent, but vis-à-vis another person, the infection is merely *transmissible* and will remain so unless it is *transmitted* by the carrier to a susceptible partner via a sex act. Thus an infected person is one in whom an STD/STI will *always* be transmissible without necessarily becoming transmitted.

Transmissibility also holds for a condition that is not fundamentally an STD/STI but might become so. This contingency applies, for instance, to vulvovaginal candidiasis (VVC), a yeast infection caused by an overgrowth of *Candida albicans*. *C. albicans* is not inherently pathogenic. Only if it overgrows to pathogenic levels (for instance, in an immune-compromised host) can it cause a yeast infection. If an infected woman has sex, her partner can get the infection. For this reason, many health agencies designate VVC as an STD/STI; e.g. [6].

Some STDs/STIs (e.g. hepatitis A, trichomoniasis; HPV, pubic lice [7]) are also transmissible through fomites that carry the infective agents: clothing, bedding, utensils, bath towels, bathtubs, swimming pools, etc. Now, although the above STDs/STIs are sexually transmitted, they are also *transmissible* nonsexually. In transmission through infested fomites, infected persons might not even be sexually active; for instance, they may be sexually inactive older women [8].

The second reason the distinction between transmissibility and transmittedness is not trivial relates to the epidemiology and clinical presentation of the illnesses. Risk has already been identified as associated only with transmissibility. However, *clinically* both transmissibility and transmittedness are independently important. For instance, with sexually active patients (including women who are, or might become pregnant), a doctor may explain how they *might* contract an STD/STI (transmissibility), even without symptoms in some cases, so that patients can take preventive steps. But if a patient already presents with symptoms of an STD/STI, the doctor must explain how the patient got it (transmittedness), and begin a treatment regimen.

Thus the applicability of one of the critical terms, “transmitted”, is questionable.

2. Seriousness and extent of the problem

There are at least 20 different types of STDs/STIs [7], and they pose a growing epidemiological challenge worldwide. Managing the epidemic requires collaboration and effective communication among epidemiologists, pathologists, microbiologists, clinicians, public health officials, sexual health specialists, and the lay public.

Unfortunately the usage of medical associations and public health institutions as well as usage in research published in English clinical literature worldwide shows a

disquieting range of terms, not only “sexually transmitted disease” (STD) and “sexually transmitted infection” (STI), but also “STD syndromes”, “STI syndromes”, “sexually transmissible diseases” (also abbreviated STD!), “sexually transmissible infections” (also abbreviated STI!), “sexually transmitted syndromes”, “venereally transmitted diseases (VD)” (receding, but not yet obsolete) —yet practitioners and researchers are referring to the same illnesses. This multiplicity of terms compromises effective communication.

Terminological inconsistencies are not confined to the U.S. On the contrary, the problem pervades *global medical English*.

A considerable number of book titles and texts, as well as journal titles and their constituent articles, use “sexually transmitted diseases (STDs)” or “sexually transmitted infections (STIs)”. A comprehensive edited manual comprised of 63 chapters is titled *Sexually Transmitted Infections and Sexually Transmitted Diseases* [9]. However, the constituent chapters make it clear that the authors are not describing two distinct conditions; i.e. infections vs. diseases.

Even a single study, in which one would expect the researcher to be consistent, may manifest a bewildering range of usage. For example, in his review article on the history of these illnesses Burg [10] used “sexually transmitted infections (STI)” in the title, “sexually transmitted diseases (STD)” in the Abstract, and “sexually transmitted infections (STI) or diseases (STD)” in the introductory sentence of his exposition.

Journal titles also exhibit inconsistency. Not only do many of the constituent articles in individual issues fluctuate between “STD” and “STI” but a journal title itself may be misleading. For instance, the longest running international journal on sexual health is *Sexually Transmitted Infections*, published in the UK since 1925. However, actual volumes of the journal reveal a complex title history. From 1925 to 1983, the journal was called the *British Journal of Venereal Diseases*. In 1985 the name was changed to *Genitourinary Medicine*, then changed again in 1998 to the now familiar *Sexually Transmitted Infections*. The lead article which launched the first issue of the first volume of the *British Journal of Venereal Diseases* in 1925, referred to the illnesses as “disease” (chiefly) and “infection” (secondarily) [11], without differentiating the meanings of these terms.

“Venereal disease (VD)” has become stigmatized and is rarely used in public discourse. Moral stigma attached to persons who had VD, so the term became pejorative. Yet venereology remains a specialty devoted to STDs/STIs, and is used today as an equivalent of “sexually transmitted diseases”. The pioneering British venereologist Robert Duncan Catterall (1918-1993) wrote scores of publications in which he freely alternated between “venereally transmitted diseases” and “sexually transmitted diseases”; e.g. [12]. And although in Britain he was instrumental in changing the name of the specialty from venereology to genitourinary medicine [13], he continued to use the two variants in his published works. However, he also made some concession to “sexually transmitted infections”; e.g. in [14].

Venereology has sometimes been combined with dermatology, because historically STDs/STIs were conflated with leprosy and other skin diseases [15] and the clinical manifestations of many STDs/STIs continue to be cutaneous lesions, for instance in syphilis [7,15]. The association between dermatology and syphilis was so close that the American Academy of Dermatology, the largest dermatologic association in the world, was first called the American Academy of Dermatology and Syphilology when it was founded in 1938. “Syphilology” was dropped in 1961 [16]. Deletion of “Syphilology” was significant: It occurred around the time when the number of new cases of syphilis had declined. As a result, the two specialties of dermatology and the study of STDs/STIs “have grown steadily apart, with dermatology moving closer to internal medicine and sexually transmitted diseases being more influenced by microbiology” [14].

Nevertheless, the association between venereology and dermatology has not disappeared entirely: The article cited earlier by Burg [10] appeared in a journal devoted to venereology and dermatology. The two fields are sometimes combined in the specialty named dermatovenereology or dermatosyphilography. However, although venereology and dermatology are no longer closely joined linguistically, cutaneous lesions remain signature clinical manifestations of STDs/STIs. For instance, of the 50 chapters in a classic text on *skin* diseases, one chapter is devoted to “Sexually Transmitted Infections” [15].

Handsfield [17] observed that before 1970, “venereal disease” (VD) referred to a smaller number of conditions—among them gonorrhea and syphilis—than are recognized today. Therefore, it is reasonable that deno-

tatively broader terms should replace “VD”. Another reason “VD” is less appropriate today is that in the past, treatment of VD focused on men, not women. Female patients were likely to be treated by a clinician in a public clinic or by a gynecologist. As a result, “Venereology was very fragmented and showed little or no tendency towards cohesion” [17]. Such gender differentiation no longer exists in the modern treatment of STDs/STIs. Nevertheless, “venereal” persists, for instance in the disease term “venereal warts”, also called *condylomata acuminata*. And “venereal *disease*” persists; e.g. in the comprehensive *Dorland’s Illustrated Medical Dictionary* [18] and in other works.

The World Health Organization’s ICD-10 2016 lists 15 Codes under the category “Infections with a predominantly sexual mode of transmission” [19]. Although the category name gives primacy to “infections”, included under this category are 4 codes designated as “disease(s)”, including “Venereal disease NOS [not otherwise specified]” (bracketed phrase in original). One is led to infer from ICD-10 2016 that sexually transmitted *diseases* represent a subcategory of sexually transmitted *infections*.

The U.S. Centers for Disease Control and Prevention (CDC) publishes online information on a page titled “Sexually Transmitted Diseases (STDs)” [20]. The viewer is directed to separate descriptions of approximately 15 “diseases, conditions, and infections”. Although most of these (e.g. gonorrhea, chlamydia, syphilis) are designated as STDs, others are designated as STIs (e.g. HPV).

MedlinePlus, an online information platform of the U.S. National Library of Medicine (NLM), also publishes information titled “Sexually Transmitted Diseases”. However, under the the title appears this note: “Also called: Sexually transmitted infections, STDs, venereal disease” [21].

In Ireland, the Society for the Study of Sexually Transmitted Diseases in Ireland (SSSTDI) aims, according to its mission, to “improve the clinical and public health aspects of sexually transmitted diseases”, and also to provide information and guidance on the “management of STIs and HIV in Ireland” [22]. Here “sexually transmitted diseases” (STDs), in the Society’s name, competes with “sexually transmitted diseases” and “STIs” in the Society’s mission statement.

In recent years several agencies and associations have shifted from “sexually transmitted diseases (STDs)” to

“sexually transmitted infections (STIs)” on the ground that, as the American Sexual Health Association (ASHA) puts it, “disease” suggests a medical problem with manifestations of signs and symptoms. Other organizations offer the same rationale; e.g. the online patient information site Patient, which argues that “strictly speaking, infections are not always associated with symptoms whereas diseases are” [23]. The association of symptoms with disease is also scientifically diffused: The National Academies of Sciences, Engineering and Medicine (NAS) defines disease as “any abnormal condition in which cells in the body are damaged *and symptoms of illness begin to appear* (emphasis mine) [24]. Nevertheless, practitioners and researchers who designate STDs/STIs as infections rather than diseases routinely list symptoms of these infections.

Conversely, many *diseases* are asymptomatic, meaning that the person is unaware that they have the condition until it advances to the point at which symptoms become manifest. Examples include the early stage of prostate cancer or of breast cancer, and hypertension. Therefore the preference for STI over STD based on the presumed absence of symptoms and signs in many infections, vs. their presence in diseases, is an untenable position.

Other organizations have simply switched to STI without explicitly justifying the switch; e.g. the British Association of Sexual Health and HIV (BASHH), the College of Family Physicians of Canada, and others.

This terminological instability fails to reflect the historical fact that the original default term, “venereal diseases (VD)” was displaced by a *single* term, “sexually transmitted diseases (STD)”, and that the shift co-occurred around the 1960s (beginning in Britain) with changes in public attitudes towards sexual behavior. First, oral contraception separated sexual activity from procreation, with the result that a satisfying sexual life became a goal in itself, especially in the West. Second, in the pursuit of a satisfying sexual life, sexually active people began to experiment sexually, including oral and anal sex, and sex with several partners of the same or different gender. Finally, the climate of sexual freedom removed the guilt and embarrassment associated with “VD.”

Duncan Catterall described the outcome of this cultural mindshift: “Gradually the term sexually transmitted diseases, or STD, became more widely used, especially in the United Kingdom and later in other English speaking

countries.... It was rapidly adopted by doctors, nurses and journalists, and above all by the patients themselves” [14]. It appears, then, that after “VD” receded, “STD” became the preferred term.

How, then, did a number of *additional* terms, proliferating to this day, arise as competitors of “STD”? The answer requires understanding more of the *social* context of the issue.

Sexual conditions such as syphilis and gonorrhea were considered *social* diseases, and were called such by lay people, clergy, and doctors. “Social” reflected the fact that members of society viewed these diseases as having adverse effects on marriage and the family primarily, and on societal well-being secondarily. Wives and children were regarded as innocent victims of the diseases, while husbands were invariably the culprits for having crossed the boundary of marriage, acquired the diseases, then infected their wives. Even doctors of the time shared this belief [25]. However, doctors and medical journals simultaneously used “venereal disease”, which reflected the *clinical* fact that the diseases were diagnosed and treated in individuals. Moreover, “venereal disease” could accommodate the clinical derivatives “venereology” and “venereologist”. (“Social” yielded “sociology” and “sociologist”.)

Venereal diseases were thus associated with vice, and therefore also fell within the purview of the clergy. Thus discussions of venereal disease were also infused with moral thinking, and physicians were expected to join forces with clergy in promoting sexual morality, certainly in puritanical America. (I have not researched this aspect of the subject in other countries.)

Prince A. Morrow (1846–1913), the internationally renowned American dermatologist and venereologist, advocated marriage as a preventative of venereal diseases, and like his contemporaries, he expected physicians to protect marriage. An early advocate of sex education, he founded the Society of Sanitary and Moral Prophylaxis, the aim of which was “the study and prevention of the spread of the Social Evil” [26] and he was instrumental in the creation of the American Federation for Sex Hygiene (active only 1910–1913) [27]. (Incidentally, ASHA was formed in 1914 from the merger of that Federation with the American Vigilance Association [28].)

Dr. Morrow wrote: “In safeguarding marriage from the dangers of venereal diseases the physician becomes the

protector of the wife and mother and the preserver of future citizens to the State” [29]. That argument has not totally surrendered to modernity, because in many countries, including the U.S., a physician may risk his or her life if they advocate procedures or treatment that many groups regard as a threat to the traditional norms of marriage, sex, and reproduction. On the whole, however, modern doctors are not charged with protecting an institution (marriage) but with protecting a person (the patient).

Thus the original equivocal status—part moral, part clinical—of sexual illnesses likely precluded the use of a term other than “venereal”, which carried both moral and clinical meanings. But the shift from a moral mindset (“*No sex*” before marriage) to a secular one (“*Safe sex*” for unmarried persons, and for married men and women who strayed) meant that clergy and physicians would eventually part ways, with clergy concerning themselves with sins (e.g. adultery), and physicians with diseases (e.g. syphilis). This parting of the ways also guaranteed that “venereal” would be confined to the lexicon of physicians, and its usage would recede except in clinical contexts.

However, although physicians alone now controlled “VD”, it was not so esoteric (as, say, “idiopathic”) that it was immune to lexical competition even in clinical usage. Its first competitor was “STD”. Since then physicians and researchers have felt free to add any term(s) they liked, without strongly defending them. Nor did members of the profession *strongly defend* the necessity for new terms. Physicians’ hands had become full, with the more urgent mission of researching STDs/STIs and educating their patients. It was this larger social context that allowed terms to proliferate.

3. Towards an answer to the question posed in the title: What criteria should govern an appropriate term?

The semantic problems posed by two of the current terms, “transmitted” and to a lesser extent “sexual(ly)” have already been described. The problems posed by “infection” and “disease” will now be discussed.

It’s easy to lose sight of the fact that microbe-host interaction establishes a relationship between two living organisms, in which each one makes distinctive contributions to disease pathogenesis. The weakness of “infection” (including clinical or subclinical infection) in the term STI is that it focuses on the *initial contact* between microbe and host; i.e. infection. Conversely, the weakness of “dis-

ease” in the term STD is that it focuses on the clinically apparent *outcome* of contact; i.e. disease. Neither term captures the respective roles played by both microbe and host when they interact, nor do the terms capture the entire pathogenic process.

Accordingly an appropriate term should convey the dynamic inherent in microbe-host interaction, and give equal weight to their respective contributions. An appropriate term should therefore incorporate four concepts *simultaneously*: infection, disease, sex(ual), and transmissibility. These concepts capture the entire chronology of disease pathogenesis: from initial contact between the causative agent to the possible, but not inevitable, progression of infection to disease.

Moreover, an appropriate term should make room for contingency on the part of both microbe and host. Some microbes are not inevitably pathogenic in all hosts and therefore do not cause damage in these hosts [30]. Moreover, unless a host is susceptible (e.g. through weakened immunity) or engages in risky behaviors, host damage also cannot occur. Contingency applies, for instance, to candidiasis, caused by *C. albicans*. As noted earlier, this yeast belongs to the normal microflora and is therefore not a pathogen. However, it becomes a pathogen only when it overgrows to the point at which it induces host damage. Candidiasis in the vagina is commonly called a yeast infection [31]. Moreover, unlike STDs/STIs such as gonorrhea, chlamydia, and syphilis, in which sexual contact is the typical route of transmission, candidiasis is less frequently spread through sex. Contingency is also applicable in conditions that are classified mainly as STDs/STIs, but in which transmission does not occur through sex but through contact with infested fomites, as explained in **Section 1**.

Contingency is the opposite of inevitability, and means that host damage depends on microbial factors or host susceptibilities and behaviors—and none of these are necessarily predictable. Contingency forms the basis of transmissibility, not transmittedness. An appropriate term should therefore incorporate the concept of transmissibility.

An appropriate term should also incorporate the concept of infection, which occurs when a microbe invades host cells. All STDs/STIs are caused by *infective agents*. If a person is asymptomatic (as in cases of HPV), “subclinical infection” is the conventional term; it is also called as-

ymptomatic or inapparent infection. However, from the clinical perspective this expression is odd, because it refers to an infection that does not manifest itself *at the time of observation*. Moreover, it is the doctor—not the patient (who is unlikely to use a term like “subclinical”)—who recognizes and invokes “subclinical infection”. But he does so in retrospect; that is, *after* the infected person has become symptomatic. This retrospective detection of infection is what makes “subclinical infection” an odd expression.

Only from the *pathogenic* perspective does “subclinical infection” make sense, for it represents the incubation period, or latency period; that is, the time between initial microbe-host contact—when the pathogen first makes contact with the human host (who is oblivious of the contact)—and the time when exposure first becomes evident through symptoms—or, in the case of mosquito-borne illness, the time between the transfer of the pathogen, via a mosquito bite, into the human host (who is oblivious of the transfer, but not necessarily of the bite) and the time when symptoms first appear. Nevertheless, even in asymptomatic hosts, host damage or an alteration in host homeostasis (e.g. stimulation of the immune system) may have occurred [32].

An appropriate term should also incorporate the concept of “disease”, despite decades of debates about the meaning of this term. Health specialists and researchers are not the only ones who disagree on the meaning of disease. Lay people and legislators also disagree [33]. However, with the concept of host damage, disease can be understood as host damage that has reached a certain threshold; that is, when the host-microbe interaction in infection “produces sufficient damage to disrupt normal homeostasis and/or to become clinically apparent” [32], producing clinical disease [30].

Host damage is associated with the *interaction* between microbe and host, and not solely with the microbe; because a strong host response can produce host-induced damage, for instance, excessive inflammation. However, this aspect of the matter applies more generally, microbiologically, and thus lies beyond the scope of this paper. The general subject is treated excellently [30, 32], and my references to “host damage” owes much to the insights in the two studies just cited. For instance, some vulvo-vaginal infections produce host-induced damage; e.g. through fomites, as when a host harbors foreign objects such as tampons [34].

Disease is a possible outcome of infection, rather than an equivalent clinical state. Therefore usage that treats the terms STD (disease) and STI (infection) as near-synonyms or as cognitive synonyms is misguided; e.g. [18,21,35]. Also misguided: usage that hedges, by employing one of the terms as an explanation of the other or as subsumed under the other (e.g. [19,35]); expositions that use two or more terms indiscriminately (e.g. [10,22]), or which label some conditions as STDs and others as STIs (e.g. [20]); and book titles which imply that the conditions are different, whereas the constituent contributions within the book make no such distinction (e.g. [9]).

Diseases which are outcomes of infection include pelvic inflammatory disease, caused by chlamydial infection. Of the over 100 types of human papillomavirus (HPV) [34], several cause genital warts, dysplasia, and cancer of the cervix, vulva, penis, and oral cavity. Herpes simplex virus type 2 (HSV-2) can cause genital herpes. The human immunodeficiency virus (HIV) causes AIDS (acquired immunodeficiency syndrome).

When an STD/STI has been diagnosed, a physician must establish Sex Partner Management with the patient, which is fraught with difficulties, either because the patient cannot or will not cooperate. Sex Partner Management can also potentially destroy relationships either because sexual abstinence may be necessary for a time, or for other reasons. For example, the numerous cases reported by Handsfield [34] included one in which the patient was a 60-year-old married businessman in whom chancroid had been diagnosed. The patient reported that he had not informed his wife, but that he had ceased intercourse with her. The patient’s distant partner (gender not indicated) was also to have been informed.

Inasmuch as both infection *and* disease are important criteria in a recommended term, the two can be combined in “infectious disease.”

Within the contexts of infection and disease, sexual transmission can be further elucidated.

Sexual transmission may be *indirect*, not direct, as is implied in the phrase “sexually transmitted.” For instance, a woman infected with syphilis cannot transmit the bacterial infective agent *Treponema pallidum* to a child unless the woman becomes pregnant—in which case the infection is transmitted to the fetus not via a sex act

(which has already occurred with the mother) but via the placenta. Thus in this case, congenital syphilis, “sexually transmitted” applies only *indirectly*. Indirect sexual transmission includes other congenital STDs/STIs: congenital chlamydia, congenital herpes virus 2 (HSV-2), congenital gonorrhea, and others. (On STDs/STIs during pregnancy, see [36].)

Indirect sexual transmission may also occur through contact with infested bodily fluids (e.g. blood), and through shared contaminated needles used to administer drugs intravenously, or needles used in tattooing and piercing. The hepatitis B virus spreads in this nonsexual way, *as well as* through sex between heterosexuals and homosexuals.

In all instances of STDs/STIs, infection is transmissible sexually *or* nonsexually; but which route transmission actually takes is contingent upon host behavior (sexual abstinence or sexual activity, unprotected or protected; contaminated injection needles) or environmental factors (contaminated swimming pools, bed sheets, etc.). Certain behaviors or environmental factors *trigger* microbial aggression. This is why microbial infective agents should be relieved of the entire burden of transmission and host damage.

Transmissibility, in contrast to transmittedness, pushes the disease chronology of an STD/STI back to the time when infective agents are present, and have already induced at least a certain degree of host damage, which has gone undetected or is detected only in retrospect (sub-clinical infection).

4. Answer to the question posed in the title

Yes, we should choose. But in light of the clinical and nomenclatural facts detailed earlier, the most practical choice would be *neither* “sexually transmitted disease (STD)” *nor* “sexually transmitted infection (STI)” but **“sexually transmissible infectious disease (STID)”**. The meaning of STID is simple: an infectious disease that is sexually transmissible. Besides the conceptual and terminological advantages inherent in “transmissibility”, “infection” and “disease” as individual terms—advantages already discussed—STID in its entirety carries its own advantage: It captures more comprehensively the pathogenesis of the sexual illnesses, from the initial presence of the infective agent to the potential transfer of that agent to a susceptible human host, culminating in possible disease. At the research level, as a comprehensive term, it spares an author the necessity to pick a term at random,

or to play it safe by using more than one term within a single presentation.

The recommended term will probably not prevent practitioners, specialists, and researchers from classifying non-sexual or disputed terms as STIDs. Candidiasis belongs to this smaller group. So does bacterial vaginosis (BV), caused by an overgrowth of commensal vaginal bacteria. Finally, from the perspective of infected patients, STID does not unfortunately minimize the social and psychological risks inherent in Sex Partner Management.

A version of the recommended term is already used in some of the literature, but with “transmitted” instead of “transmissible”, and sometimes split with a comma, as in reference to syphilis as a “sexually transmitted, infectious disease”. (The comma is unnecessary.) But the term “sexually transmissible infectious diseases” is not in common use, nor have I seen the acronym STID associated with it. In sum, to my knowledge, “sexually transmissible infectious diseases” (STID) is not used, but its semantic and clinical advantages make it *professionally* advantageous.

I emphasize *professionally* because vis-à-vis the public, the monosyllabic acronym STID is easy to read and say, but its full name is a bit of a mouthful, even for a linguist! However, this problem is widespread in science and clinical medicine, including a field of sexual health, which contains many terms which, in their *full* versions, are also a mouthful. The common solution in communicating with the public is to use acronyms or initialisms in headings, and then explain the condition in the exposition. However, even explanations sometimes avoid the full terms, because the full terms distract public readers. Examples of common abbreviations in sexual health include HPV and HIV/AIDS.

5. Conclusion

Change in thought and language is *inevitable*, and change may entail the accumulation of terms, as we’ve seen. Most uses of STD/STI terms by researchers and others imply that the terms are cognitive synonyms; that is, semantically equivalent terms denoting the same reality.

However, it is well-known linguistically that *speakers do not like absolute equality in language*, as when, for instance, two or more terms have exactly the same meaning. Members of the public are most familiar with this—although they might not know the history—when

a borrowed word enters the lexicon and competes with a native word. Something has to give: One word will defeat the other, or if both prove invincible, they make peace and agree to partition the lexical turf—to put it anthropomorphically. The competitors may partition on the basis of formality or domain, or agree to differentiate semantically. This is why we have “chef” (borrowed) vs. “cook” (native), and “femur” (borrowed) vs. “thighbone” (native), among hundreds of other examples.

Medical language is unusual in that it has an unusual tolerance for cognitive synonyms, as the field of sexual health demonstrates. Linguistically this confuses people. On the other hand, members of the public know that medical language is different from ordinary language, and medical professionals know that as a result, they have to “translate” or explain their specialized terms so that the public can understand.

On the other hand, a healthy field does not allow its key terms to grow unhealthily like cancerous cells. Instead, it monitors terms, continually questioning, for example, whether traditional terms remain acceptable during a later period in which both society *and* science have changed, and whether innovative terms should be admitted into the lexicon without having first being vetted by knowledgeable professionals. If two or more sexual terms prove strong enough to survive, then their use should somehow be differentiated. STID too should undergo such scrutiny.

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