Globally, violence against women is increasing, and is currently recognized as a major public health problem with significant consequences to women’s health [1]. The detrimental health effects such as injury, chronic pain, gastrointestinal, and gynecological signs including sexually-transmitted diseases, depression, and post-traumatic stress disorder have been observed in abused women [2]. Violence, like in other Asian countries [3], is a huge problem in Pakistan [4,5]. In particular, domestic violence is common [6,7], and low educational status, low empowerment, poverty, the dowry system, and males’ addiction to alcohol were found to be some of the factors associated with domestic violence [4]. In addition, Pakistan has high burden of HIV/AIDS, with an estimated 85,000 people living with HIV [8]. The HIV/AIDS epidemic has begun in Pakistan [9], but it is still “concentrated” in injection drug users (IDUs) and male sex workers (MSWs) including transgender, often known as “Hijras” [8].

Female victims of intimate partner violence (IPV) have been found to be associated with increasing risk of sexually transmitted infections (STIs) and HIV infection [10,11]. These studies have shown that intimate partner violence yielded 3.9 and 1.6 times higher odds of resulting in HIV among women in India [10] and South Africa [11] respectively. This is likely due to increased sexual risk behaviors and STI prevalence among abusive men [12], who subsequently transmit these infections to female partners. Thus, IPV is considered a risk marker for sexual transmission of HIV to their wives [10]. It has been demonstrated that sexual risk behavior is high among abusive men [13,14] and that they have higher level of control over sex and sexual protection [15,16]. In addition, socio-cultural pressure, and fear of leaving the husband and children, result in females bearing the violence of their husbands/main partners, making them more vulnerable to contract HIV. Gender inequality is common in Pakistan, more so in rural areas. This is one of the major risk factors of IPV, and subsequently contracting HIV from abusive husbands. As a part of societal norms, especially in rural areas, where the majority of the population resides, women are suppose to stay home and care for their husbands and children, thus women have fewer opportunities for education as compared to males, even before marriage. As a result when they grow up, women’s participation in the labor force is less and they become economically, socially and emotionally dependent on their husbands (Figure 1). The lack of empowerment and independence of women reduces their ability or willingness to negotiate condom use thus making them likely to contract HIV from their abusive husbands.

There is a risk that the concentrated HIV epidemic in Pakistan could spread to the general population. Several factors contribute to the spread of HIV, for instance, the high volume of unprotected sexual acts and poor infection control strategies in the country [17]. One of the factors that is often overlooked is the role of IPV and risk of sexual transmission of HIV to the wives/main partner of IDUs, clients of sex workers, truck or bus drivers, and migrant workers. They can act as “bridging groups” [18]
that could spread this epidemic to the general population. IPV is prevalent among IDUs; it has been estimated in one of the study in 2007, more than 40% of male IDUs reported perpetrating physical and/or sexual violence against their main female partners in the past year [19]. The findings in this study revealed that low education, homelessness, psychological distress, and unprotected sex with main and nonmain HIV-negative female partners were associated with IPV perpetration against main female partners. Male IDUs often avoid disclosing their drug use to their wives. The majority of their wives do not know of their drug-using activities until they are married, making them generally helpless to protect themselves. Similarly, one quarter of married truck drivers were found to engage in commercial or non-commercial extramarital sex, and rarely used condoms during sexual acts [9], and were also found to be abusive to their wives/main partners [20]. A large majority of Pakistanis work abroad [9], especially poor manual workers [21], and many of them remain away from their homes and families for years [21]. Prolonged absence from their homes increases the likelihood of these individuals in engaging in sexual activities, especially with sex workers. In one study over half (55%) of single men reported that they were sexually experienced and 36% of married men reported premarital sex, with a very few individuals stating that they wore a condom during sex [21] thus increasing the likelihood of transmitting HIV infection to their wives/main partners.

There are several potential areas where we can intervene to break the vicious cycle of IPV and HIV. We can intervene by promoting civil rights for women, focusing on prosecution of men who inflict violence, empowering women to oppose violence, and identifying the causal pathways leading to IPV along with social, political, economic, and environmental factors that influence IPV. Another approach is to engage local communities in the process of problem-solving, building on local knowledge and generating local response. The community participation approach has shown promising results, as illustrated in the evaluation of the UNAIDS/UNITAR AIDS Competence Program. This program is based on building local knowledge and community ownership to achieve effective HIV prevention [22,23]. Clinicians can also play a vital role in reducing IPV and the risk of HIV transmission by incorporating screening for IPV among women who go to physicians’ clinics [24], especially STI clinics, and by educating women about how to reduce the risk of HIV transmission. Developing clinical programs for men in which
IPV is identified as a potential risk factor for HIV transmission to their female partners can also be helpful. These programs may benefit both men and women in the modification of gender norms supporting both IPV and sexual risk.

Given the high prevalence of IPV, including sexual violence in Pakistan [4], it is likely that wives/main partners of abusive men, especially IDUs, clients of sex workers, truck drivers, and migrant workers, can spread this epidemic to the general population. Exposure to IPV can potentially be a risk marker for having sex with a high-risk partner, a direct risk factor to facilitate HIV infection based on unprotected forced sex, or both [10]. Reducing gender inequality by empowering women through education, social support, economic development schemes, and employment creation is necessary to reduce IPV and its risk for HIV among women in Pakistan.

Conflict of interest
No financial disclosures were reported by the author of this paper.