Women and Higher Education in COVID-19 Times: Challenges and Possibilities for Sustainable Development'

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Abstract COVID-19 has not only created a health emergency but also seriously disrupted the functioning of economic and social institutions. Its impact on higher education has been direct, swift and devastating. Higher education institutions (HEIs) form the backbone of progress towards Sustainable Development Goals (SDGs 2030) in their stewardship of research and innovation, engagement with policy debates and commitment to the education and training of professionals. The crucial element that facilitates this trajectory, however, is women's participation in HEIs, premised on principles of equity and inclusivity, widening participation and access that enables individual empowerment and prosperity on the one hand and ensures valuable contributions towards the SDGs 2030 on the other hand. Nevertheless, it is now feared that COVID 19 may reverse the gains made towards Goal 4 of SDGs 2030, as it structures new barriers that make it difficult for girls to stay in education. This is a major worry because the ripple effect from this may not only derail achievement of Goal 5 but other SDGs as well. Given that the World Bank and UNESCO anticipate large number of students, especially girls in poor countries to drop out of education, the question is, would it be the same for females in higher education? As formal education is relocated in homes, where unequal gendered relations of power might play out strongly against them. Women may find it difficult to pursue their higher education. This may be because of their limited access to resources, burden of domestic work, caring responsibilities, domestic violence, mental and physical health or sociocultural norms. Conversely, the question is also, does this virtual space of higher education, offer some unique opportunities for us to facilitate the access of women to higher education and ensure their retention? Is it an opportunity to rethink education in a way that is more inclusive and flexible? These are important questions to contend with to make an informed, gender sensitive response to the challenges faced by women in higher education.

Keywords Women in higher education · COVID-19 · Sustainable development goals · South Asia · Vulnerabilities · Opportunities

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1 The Disruption of COVID-19 and Higher Education

The first COVID-19 case was identified in Wuhan in December 2019 and by March 11, 2020 it had been declared a pandemic by the World Health Organization (WHO 2020). August 23, and the world was still smarting with pain, suffering under strained health systems, crippled economy and disruption of social systems and threat to life itself, as the pandemic struck more than 23 million and left over 8 hundred thousand dead (Covid-19 Dashboard, John Hopkins 2020). Several countries suffered from a second wave of the pandemic after the first had been abated (for example, Hong Kong, China, Vietnam, Fiji, South Korea, Spain, Iran, Australia, UK, Germany and France) (Philipose 2020; Chadwick 2020). Given, its massive scale, the multidimensional impacts of this pandemic can only be expected to persist for quite some time to come (BBC 2020; Nicola et al. 2020). UNESCO (2020a) estimates that COVID-19's impact on the disruption of education alone, will outlive this generation.

Higher education sector has been one of the hardest hit, left to grapple with an unprecedented global situation, with few hard choices (UNESCO 2020a, b; Bassett and Arnhold 2020). According to an estimate by April 8, 2020, higher education institutions had been closed down in 175 countries affecting '220 million post-secondary students,' with their studies either ended or 'significantly disrupted due to COVID-19' (World Bank Group: Education 2020, p. 1). Table 1 captures the global scale of this disruption. While the devastating impact of COVID-19 may be displayed to be more significant at the given moment in upper and lower middle income countries, in lockstep with the spread of the virus, it is anticipated that numbers would rise dramatically for lower middle and low income countries, especially in South Asian and African regions as the pandemic spreads (ibid.).

The response of higher education institutions (HEIs) to COVID-19 can be mapped across a spectrum of inter-and intra-regional variation, between choosing to remain open, if possibility existed, (as in the case of University of Virginia in Australia) to halting all educational delivery (for example in Malaysia). A majority, however, closed campuses and moved their courses online (Crawford et al. 2020). A survey conducted between March 25–April-17 2020, of 424 HEIs in 109 countries, across multiple regions, revealed that 59% of these had their campuses completely shut

Table 1 The scale of disruption in higher education

Income level	Out-of-school tertiary ed students	Total tertiary ed students	%
High income	53,479,089	54,103,566	99
Upper middle income	97,493,490	97,934,594	96
Lower middle income	65,358,490	66,421,264	98
Low income	3,808,691	4,146,072	100
Grand total	220,139,760	222,605,496	99

Source The COVID-19 crisis response: Supporting tertiary education for continuity, adaptation, and innovation, World Bank Group: Education- Table 1, p1, 2020

down (Marinoni and de Wit 2020).These decisions, nevertheless, have been dynamic, responsive to the pandemic spread (Crawford et al. 2020). Even as HEIs stagger to their feet, clutching onto online mode of instruction, they now operate in a different world reality, as the health emergency created by COVID-19 leaves behind 'widespread socioeconomic implications,' with no aspect of life untouched (Nicola et al. 2020 p. 185). This points to the urgent need of taking into stock the challenges by HEIs and planning an informed response, sensitive to at risk students, particularly women to achieve Goal 4.[1] Failure to do so would consequently affect the attainment of goal 5[2] of the sustainable development agenda 2030 (UNESCO 2017), with a domino effect on the achievement of all the other SDGs also, because of their fundamentally interlinked status (ibid.).

The imperative of HEIs to shift to online instruction in the face of COVID-19 was not without its problems. Online courses had to be designed, at a breakneck speed over a matter of days. It was a 'speed staggering Emergency Remote Teaching,' which may be different from regular online courses, which typically take six to eight months of preparation (Hodges et al. 2020). While some universities were already following hybrid or online modes of instruction, for others, for example, several in Afghanistan, India and Pakistan, with limited technological capacity could do very little to support their students (Khan et al. 2020). Nevertheless, it was a major challenge for HEIs all over the globe to simultaneously update their infrastructure, train faculty, develop online resources and support their students, while facing serious financial problems (Bao 2020; Crawford et al. 2020).

The financial challenges for HEIs were a major concern, given the immediate new investments required and the paradoxical drop in the tuition fees, as large numbers of fee paying international and national students headed home with uncertain plans to return, given both health security concerns and loss of family incomes (Friedman et al. 2020; Maslen 2020; McKie 2020; The Japanese Times 2020). The magnitude of the disruption begins to emerge, when one realizes that only in US Chinese make up 33.7% and Indians 18.4% of the international student population, a majority of which had to return home (Times 2020).To make matters worse, with no definitive date for re-opening, HEIs were obliged to make refund fees charged to students for the use of physical resources i.e. hostels, parking spaces etc. (Maslen 2020), while forgoing annual raise in tuition fee (ibid.). This affected universities across the globe. SOAS University of London UK, in the face of financial crisis had to opt for jobs cuts (McKie 2020), while Monash, the largest Australian university, with 80,000 students and 43 campuses and with more than AU$5 billion (US$3.2 billion) assets, reported a major financial shortfall of AU$350 million (US$226 million) in revenue in the current year (Maslen 2020).

Public universities and colleges, which work around the agenda of equity, took the major brunt of the economic down turn, as governments redirected their funding. With the economic recession looming large and failing health systems, funding higher

[1] "Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all." (UN, Transforming our world: The 2030 Agenda for Sustainable Development, 2015).

[2] Achieve gender equality and empower all women and girls (ibid).

education was not the priority. In US, Universities of California and Rutger faced serious shortfalls in their budgets that far exceeded the federal funding they received, as they simultaneously tried to support their students' transition to online instruction and make refunds to them (Maslen 2020). In lower-middle and low-income countries, while little data is accessible in this regard, the situation is bound to be worse, where governments already struggling with fragile economies, and poor health systems, now juggling through a conundrum of competing demands on their resources, find it easier to slash the funding of HEIs. In Pakistan, for example, the funds allocated for higher education in the budget were drastically cut by 5.94 billion for the fiscal year 2020–21, seriously threatening not only the quality of subsidized education these HEIs offered but also their very survival (Imran 2020). To make matters worse, the foreign aid on which HEIs could count on earlier could also not be forthcoming, as the world prepares for a global recession (Nicole et al. 2020). UK's decision to assimilate DFiD under the foreign office, for example, may squeeze the funding it can offer to lower-middle and low-income countries (Landale 2020). Even more worrying is the anticipation that this 'state disinvestment in higher education may become the norm in years to come' (UNESCO 2020c, p. 3; Yuen 2020). This would be a baffling stumbling block for not only the achievement of Goal 4 focusing on the provision of inclusive quality education for all but also for the gender focused Goal 5, affecting all other SDGs 2030. UNESCO (2020c) estimates university students to be most at risk of dropping out, among the 24 million who may not be able to continue their education (half of these will belong to South and West Asia and sub-Saharan Africa ibid.), while others estimate this figure to be close to 1.5 billion (World Bank 2020).

The hardest hit, as always, are the ones already vulnerable and disadvantaged stratified across class, disability or other stigmatized markers of identity, with gender being a salient category cutting across all other dimensions. For women and girls, the worry is not just the anticipated learning losses or disruption due to the closure of educational institutions but that they may drop out of education at all levels (Giannini and Albrectsen 2020). The specific vulnerabilities of women in relation to their participation in higher education in the face of COVID-19 and the resultant implications for SDGs remain under discussed in literature. This paper aims to address this gap, given that gender equality is central to SDGs 2030, addressed specifically in Goal 5, but also 'mainstreamed into numerous others goals' including Goal 4 (Fredman et al. 2016). Hence, the emphasis on higher education in SDGs 2030, given the understanding that while progress might have been made regarding the participation of women in higher educations, the gender gaps remain significant in several low and lower income countries, especially conspicuous when class is brought in as a variable (Ilie and Rose 2016).

Method

The interest in the topic actually triggered from conversations with women students at a university in Pakistan. As some themes became consistent, for example, dropping out or semester freezing, marriages during COVID-19, time squeeze; the burden of children's education and domestic work, caring responsibilities and access to

digital resources, we decided to use to explore it using a 'desktop analysis approach' following (Crawford et al. 2020). Specific attention was paid to the reliability of the sources (ibid.). A total of 88 articles were used for this paper, which were filtered from more than 200 papers which were read up and not used either because they became irrelevant as the argument took shape or because of the limitation of space. In the first instance, resources were identified using the key words 'COVID-19 spread.' This was to determine the scale of the pandemic. This data was updated several times when writing the paper. Simultaneously, internet search was done using terms 'gendered impact of COVID-19,' 'COVID-19 impact on higher education,' and COVID-19 women and higher education.' We could find little in relation to the latter. Once the gendered themes began to emerge, we started to explore each theme in relation to women in pre-COVID situations, for example women's participation in higher education, unpaid work, ownership of assets and other forms of discrimination. This allowed us to make connections and interpret how the existing forms of vulnerabilities translate into barriers for their participation in higher education.

This paper now proceeds to discuss the significance of higher education and within it the role of women's participation for SDGs 2030; the third section extrapolates the specific issues faced by women across country contexts, well documented in literature, and now exacerbated on their access to higher education in times of COVID-19; the fourth section discusses the affect it may have on the achievement of SDGs 2030, followed by the possibilities that the current situation offers. The fifth section concludes the argument. In this paper, the term 'women' is applied broadly to females of college/university going age here. The discussion of higher education institutions applies to all post secondary colleges and universities, while the arguments made in the paper are more relevant to lower-middle and low-income countries than others. Similarly, some aspects discussed here may be more salient to some contexts than others, nevertheless, they do cut across borders and affect women in general and their higher education in one form or the other.

2 Higher Education, Sustainable Development Goals and the Participation of Women

Higher education is undeniably the stepping-stone for the achievement of sustainable development, a realization which has come after missing out its significance in Millennium Development Goals 2015 (UNESCO 2015; Ilie and Rose 2016). The target 4.3 of SDG 4 pledges to 'ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university.'(UNESCO n.d.)

Universities as ultimate seats of teaching/learning, knowledge and scholarship not only have the capacity to influence policies for transformative change but also have a role in the training of educators, and nurturing a whole generation that can

work towards 'sustainable economic, social and political directions of the globalized interdependent world' (Blessinger et al. 2018). Along with encouraging critical thought and deliberation for sustainable development, higher education institutions (HEIs) also lead to inclusive mindsets and behavior that form the basis of socially just democratic societies; hence, the centrality of HEIs in pushing the agenda of SDGs 2030. UNESCO emphasizes:

> Higher education also forms an important part of other goals related to poverty (SDG1); health and well-being (SDG3); gender equality (SDG5) governance; decent work and economic growth (SDG8); responsible consumption and production (SDG12); climate change (SDG13); and peace, justice and strong institutions (SDG16) *(UNESCO: Higher Education and Sustainable Development Goals,*n.d.*)*

This role of HEIs in achieving SDGs 2030, apart from being contingent of the quality of education is also based on inclusion of women in specific who form almost 49.5% of the world's population (World Bank Data 2019). While quality of higher education has been passionately guarded ever since the first seat of higher education was established in 859 AD, inclusion of women has been a struggle. Historically, females have been excluded from sites of higher education (Morris 2011), Oxford and Cambridge in UK, for example, fiercely held the fort against the entry of women and their access to degrees until last century (Dyhouse 2003). It is only over the past 100 years that women have found their way into universities after a long and painful struggle that challenged both the long established norms of the academia and the social and cultural traditions (Moore 1987). Ever since, women have been making their mark in a number of fields: law, medicine, architecture, politics, business, art, literature and education itself, more often than not made possible through access to higher education. While women's participation has been steadily increasing, it remains problematic in several middle and low-income countries (Klasen 2019).

The emphasis of SDGs 2030 on gender equality and empowerment and the need to address all forms of discrimination against women more specifically in Goal 5 is also a unifying thread that runs through all the other SDSs. This is an acknowledgement of the core importance of addressing gender based inequality for achieving sustainable development and an admission that a lot more needs to be done in relation to the discrimination faced by women. The target 4.3 of SDG4 that aims to 'ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university,' (UNESCO 2017), underscores the importance of the participation of women in higher education. Women's participation in higher education can carve pathways to achieve Goal 5, by increasing women's access to resources and giving them voice and representation; while also ensuring their wider participation in social, economic and political fields and pushing the agenda of SDGS (Szto 2015). Ensuring the access and retention of women in HEIs then may be seen as both as a matter of equity and as a strategic investment to accelerate the process of socioeconomic development, and establishing of democratic and peaceful societies as espoused in SDGs 2030 (UNESCO: Higher education and the Sustainable Development Goals, n.d.). Hence, the need to take into account the challenges faced by women to pursue higher education in these unusual times to ensure their presence in these sites.

3 In the Eye of the Storm: The Challenges of COVID-19 for Women Participation in Higher Education

Women have been facing glaring discrimination in all fields of life and it is until recently that some progress has been made in terms of their inclusivity in all walks of life, and higher education is no different (UNESCO 2017). Although the number of females in higher education has increased, this progress must be seen as fragile, especially in lower-middle and low-income countries, where wider social inequalities are more persistent (ibid.). The Global Gender Gaps Report (2020) based on 107 countries declares that it will take on average 99.5 years to close the gender gap. It estimates that women are worst off in political participation and followed by economic participation. It states that.

> Financial disparities are slightly larger (on average), explaining the step back registered by the Economic Participation and Opportunity subindex this year. On average, only 55% of adult women are in the labour market, versus 78% of men, while over 40% of the wage gap (the ratio of the wage of a woman to that of a man in a similar position) and over 50% of the income gap (the ratio of the total wage and non-wage income of women to that of men) are still to be bridged (Global Gender Gap Report 2020, p. 6)

Although countries did better in educational attainment gender gap, the report argued that:

> Even in countries where education attainment is relatively high, women's skills are not always in line with those required to succeed in the professions of the future. In addition, they encounter barriers to employment in the most dynamic and in-demand occupations (Global Gender Gap Report 2020, p. 5).

Now, the gendered impacts of COVID-19 (Wenham et al. 2020) threaten their presence in HEIs, which offered them transformative possibilities, as these conflate with their low positioning within families and in the society. Five major challenges may be identified (although several others might also exist) that women may confront as they plan to access or remain in HEI in the current situation and which could possibly push them to drop out:

3.1 Shrinking Economies: The Financial Crunch and Shifting Priorities of Households

The economic setback in the COVID-19 has resulted in the loss of millions of jobs and family incomes across the world. It has also drastically affected the funding of public education institutions, which has been contingent upon economic growth (Evans et al. 2020). The situation is worse lower middle and low income countries, who can no longer rely on financial aid from richer countries, unlike earlier disaster situations or during the financial global crisis of 2008–09 (ibid.). This threatens the agenda of both equity and quality of public sector higher education systems, while

increasing the pressure on families for paying up for the education of their children, as financial aid and scholarships dry up.

As millions of families suffer from the economic backlash of COVID-19 with loss of jobs and incomes, against rising inflation and real health risks, their priority might not be the higher education of their children but survival. Student dropouts are the likely outcome (World Bank 2020). As part-time jobs become rare and financial support difficult, a large number of students may not be able to continue their education. In Japan, for example, an online survey of 1000 participants in April, 2020 concluded that one in every 13 students was considering to leave university, following economic hardship (The Japane Times 2020). The situation can be assumed to be worse in lower middle and low-income country contexts, where large populations fall below the poverty line (Strauss 2020). Mali, Niger and South Sudan are three countries with lowest levels of enrollment for girls, and the closures have further forced 4 million girls out of schools (Giannini and Albrectsen 2020). With hardly any data, one can only guess the number of women leaving or who may leave higher education in similar contexts, where they are economically dependent on male members of the family to provide for their education. An income which may now be either gone or severely reduced.

Women maybe the first to leave higher education if the financial constraints continue, amid pressures of finding working to support family income, free up family funds, help with domestic work or care for the sick, elderly or the young. The 'choice' may be made by the women themselves, socialized into their role of putting the needs of others before them (Qureshi 2020). In places where it is not uncommon for women to be used as bargaining chips to negotiate truce with enemies, as in the case of 'vani' an age old custom practiced in certain regions in South Asia (Munir and Akhtar 2014), the onus is on the 'good' woman, like in the fairy tale of the Beauty and the Beast, to give up her ambitions- to be imprisoned so others are free. Hence women may just feel obliged to give up their education so that male siblings could continue with theirs when incomes become uncertain.

In several regions, where the positioning of women remains secondary in the family, so does their education. For example, in contexts like Pakistan, India and Vietnam, where male children are traditionally entrusted with caring for aging parents, a simple cost benefit analysis may typically make families conclude that material returns to the family come only with investment in the education of male children (Saha 2013). In addition, the widespread custom of dowry, whereby a family needs to spend a hefty amount to marry their daughters, one way or the other, may also deter families to spend the money on the higher education of their daughters in these times of financial instability. In all probability they may also consider it only fair to spend the sons' share of family funds on their education and save the share of daughters for their prospective marriages, with the latter now in foreseeable future given the age of these women.

3.2 Increase in Domestic Violence and Reduced Support

The social distancing, isolation and lock downs to contain the spread of COVID-19, was soon followed up by surging reports of domestic violence around the world (Taub 2020; Campbell 2020; Usher et al. 2020). This rise in domestic violence has been related to a complex range of factors 'economic stress, disaster-related instability, increased exposure to exploitative relationships, and reduced options for support,' issues that have been observed to follow at the heels of a pandemic (Peterman et al. 2020). While the victims may also be men (Fulu et al. 2013), it is the women and children who are in the eye of the storm (Usher et al. 2020). Even before the pandemic, according to an estimate every one in three women across the world suffered from one kind of abuse or the other in her lifetime (Devries et al. 2013).

Now the magnitude of their vulnerability only increases, as women find themselves locked up in homes (Campbell 2020; Usher et al. 2020; van Gelder et al. 2020; Bradbury and Isham 2020). The quarantines imposed by governments enable the perpetrators of domestic violence abuse to effectively use their classic strategies of isolating victims and keeping them their daily activities under surveillance (Hagan et al. 2019). Away from the public eye, the violence in the private sphere hardly noticed. Violence and abuse may exacerbate as psychological and economic pressures rise with extended lockdowns and 'negative coping mechanisms' for example alcohol or drug use, would now take place at homes, leaving women more vulnerable than ever (ibid.).

For women in HEIs, as the 'critical emotional support and […] opportunity for a "reprieve" from their abusive home environment [offered by HEIs in the form of hostels, libraries and classrooms] disappear (Campbell 2020) and friends move into shadows, it may become very difficult for them to continue with their education. Even asking for help and support may also become more complicated under the watchful eye of the perpetrators of domestic violence (Fielding 2020). All this compounds the dilemma of several women in higher education, who need to cope with both academic pressures and the unbearable situation at home.

In contexts, where domestic violence is normalized, and justified by women themselves (Biswas et al. 2017), the risk of exacerbation of violence becomes manifold. The stigma attached to being a single mom, social pressures to stay in marriages and family homes, financial dependence and a general silence around family based violence or abuse, and the strong likelihood of the blame rebounding to the female victim, may force women to be bear it quietly. While access to higher education is a way out of the distressing situation, with the possibility of financial independence, awareness and finding a voice eventually against this injustice, several may not be able to cope with the existing pressures. They may drop out or perform poorly as higher education move into unpredictable and volatile spaces of their homes.

3.3 Division of and the Demands on Time

Despite the significant achievements in closing the gender gaps in education and labour market where women have entered domains that were historically male dominated fields, culturally embedded inequitable gendered division of labour at home persist. When women contribute to family incomes, working outside homes, this only adds to the burden of unpaid, time intensive domestic work they continue to carry disproportionately more than men (Yavorsky et al. 2015; Mannino and Deutsch 2007; Milkie et al. 2009; Offer and Schneider 2011; Raley et al. 2012; Yeung et al. 2001) Although men are now expected to be involved in the care of their children, especially in western contexts (Pleck 2010), the time they actually invest in domestic work is still much lesser than women (Garey 1999). There is not a single country where men are involved in equal share of unpaid work at home (Global Gender Gap Report 2020).

A justification for this inequitable distribution is often offered from 'time availability perspectives', which means that the person spending most time at home does most of the domestic work (ibid.). What is often forgotten in this seemingly just arrangement is that women are expected to cut down their paid work hours after children, while men are not (Ferrant et al. 2014). The resulting loss of income, along with historically low ownership of assets and the culturally embedded expectations of domestic work, lowers womens' 'bargaining power' to ask for more gender equitable division of labour at home (Sanchez and Kane 1996; Gupta 2006). It may also be argued that this is a part of "doing gender" i.e. reinforcing the gender role performances that are culturally expected of men or women (Sandhya and Jayaraman 2019). Hence, women suffer from a "time squeeze" (Milkie et al. 2009), which becomes even more pressing with the caring of the sick and elderly in a family (ibid.) or a child with disabilities (Traustadottir 1991). Such patterns of gendered time usage in domestic work, more or less is a feature common to all over the world (Hong 2019; Nawaz and McLaren 2016; Strong et al. 2016; McMunn et al. 2020), which can be argued to have intensified during COVID-19 as all the family members stay at home, expecting to be served.

Women in higher education, especially during COVID-19, are on a fragile footing because they are not only NOT contributing to the family income but making demands on it, which dramatically reduces their ability to negotiate the time (Fafchamps and Quisumbing 2003), they need to be freed up to focus on their studies. The pressures become manifold in the case of a large number of mature female students who may be married, divorced or single parenting. Concentrating on academic work from home may be a challenge in itself amid competing demands on their time, by children, elderly, the sick and other male members, who in certain Asian contexts consider it derogatory to help with domestic work. Deflecting these demands may be difficult because they can no more detach themselves physically, as they could earlier in the space offered by higher education institutions. To make matters worse, the closure of schools means that they might have to take on the additional role of educators for their children, or siblings without any chance of other duties being taken off

their shoulders (Moreno and Shaw 2018).The consequences, may it be lower course grades or the decision to put their higher education on hold, would have significant negative implications for their lives.

3.4 Health Risks: Mental and Physical

Women are not only more susceptible to the pandemic, by virtue of being primary carers but also to physical and mental health risks in these times that may inevitably affect their participation in higher education. The higher number of women in medical professions (Boniol et al. 2019) automatically feeds into an assumption that more women than men might be engaged in the discipline of medicine in higher education institutions and if closer to the final year may also be engaged in practical work in hospitals. The 'systematic differences' in their positioning in the health sector, across 104 countries, reveal more women than men as nurses, midwives and health workers (ibid.). This means that they do not only have little power for decision making but also face a higher risk to the disease because of more intimate contact with patients (Ramakrishnan et al. 2014), either at home or as part of their higher education.

Although gender segregated data of COVID-19 indicates more deaths in men than women, may be 'because of sex related immunology or lifestyle patterns,' (Wenham et al. 2020), it does not cover the vulnerability to contracting the disease, which may be higher for women (ibid.). If learning from past can shed any light on the health risks for women, in the 2014–16 the spread of Ebola and Zika viruses showed that women were not only more susceptible to catching the virus because they were the 'primary care-givers in families, as well as the front-line health-care workers,' but also because they had little decision making power and had limited access to health care, while government resources for reproductive health for directed elsewhere (ibid.). It has also been reported that when women catch the COVID-19 they are more severely, stigmatized and less cared for (McLaren et al. 2020). Women in higher education may then be coping with these larger issues as try to continue their studies and these pressures may compound their stress related to completion of academic work etc.

3.5 The Digital Divide

While gender-specific quantitative data is limited, particularly in developing country contexts, various studies indicate a strong evidence of the digital gap across genders (Hafkin and Huyer 2007), more across marginalized groups and minorities than others (Tolbert et al. 2007; Mumporeze and Prieler 2017). In low-income countries on average, 30% women are less likely than men to use Internet, while in some countries this gap stands at 80% (Global Development Lab: USAID 2020). Negating the common assumptions that women are 'technophobic,' while men excel in the use of digital services, Hilbert found empirical evidence from Latin America and Africa

that the digital divide between the genders, both in terms of usage and access emerged from women's limited access to well paid jobs and education (Hilbert 2011). This is also an important aspect of the well-documented issues of women's poor access to resources within the family (Brännström 2012). Whatever the cause, this means that the digital divide across gender will clearly aggravate the disadvantage of women in HEIs during COVID-19. Poor connectivity of Internet, limited access to computers and other devices will make things increasingly difficult for women as they study from home. While this may also affect men living in rural areas where internet connectivity is poor, the velocity with which it hits women is much more, especially in contexts where their social mobility is constrained not only by COVID-19 but also be sociocultural norms (Parvazian et al. 2017).

These multiple issues disproportionately weigh on women and make it difficult for them to participate in higher education. May it be worry of financing their education, loss of family incomes, pressures of domestic work, caring responsibilities, domestic violence, limited access to technology, health risks, competing demands on time or a general sense of powerlessness and loss of control, these may make them think twice about continuing their higher education. If HEIs turn a blind eye to the multiple issues faced by women who come to them in these times, it may not be possible for these women to continue. This in turn may not only directly affect achievement of Goal 4, that pledges inclusive and equitable education for all, but also severely affect Goal 5 that aims to eradicate all forms of discrimination against women to ensure their equal participation provide and contribution towards all the other sustainable development goals. Participation in higher education is a crucial means for women to be able to challenge inequitable structures, have greater decision making power, acquire financial independence, close gender wage gaps and take on leadership positions. The threat to women's participation in higher education does not only jeopardize their own progress but also wider sustainable development processes, which remains deficient in their impacts without the educated and informed contribution of women. It is then important to deliberate on ways that women can be supported to access and continue their higher education.

4 Enabling Possibilities Through Support Systems for Women in HEIs

The new normal of the higher education in terms of online instruction during COVID-19 times creates unique challenges for women as discussed before but the situation also offers possibilities for women's education, which may be capitalized with well-thought out support.

Many higher education institutions were offering online degrees and courses, before COVID-19. However, these were not considered at par with those offered face to face in classroom settings, with little market value (Hodges et al. 2020). Now as universities around the world have been pushed into the virtual space, there is now

an opportunity to access educational content of the best -Ivy league universities from home. In addition, several universities have also slashed their tuition fees, or waived off their annual fee increase. The aim of the HEIs has been to facilitate the access and retention of students in these difficult times, although they themselves crunch under the weight of a slow economy. Furthermore, as online instruction is normalized, many universities also allow transfer of credits from online courses taken elsewhere. This reduction of cost and online access to a large number of universities across the globe is certainly an opportunity for women.

Theoretically speaking, in contexts where women face restrictions on their mobility arising from tradition, religious norms, concerns for their security or expectations to take up domestic responsibilities, online higher education now ensures a viable option without comprise on the quality and prestige of the education offered. The current times open up the opportunity for them to continue their study from home, with a well-recognized college or university with lesser cost, while being physically at home and navigating their time through multitasking. Similarly, mature women students who are single parenting, working and simultaneously studying may find it easier to access their HEIs from home. This takes the edge off their day which was earlier spent in commuting, pick/drop of children from schools/ day cares and then rushing to their colleges/ universities. Now, all that is a simple click away for an education whose market value is not compromised.

However, for women to actually capitalize the current situation, considering the issues discussed earlier (see Sect. 3), we need to deliberate on support systems specifically for women to ensure that we do not lose them in HEIs. The first and foremost thing in this regard is a recognition of gendered COVID-19 impacts on women and its inevitable impact also on their participation in higher education. In this regard, HEIs need to reach out to their female students to understand their specific issues. While simple surveys might help, some qualitative data collection in the form of focus group or individual interviews may be needed to fully capture the deeper problems. This is best followed up by discussions across HEIs so that some collaborative work can be done in this direction and collective deliberations are undertaken to understand and respond to the problems faced by women participating in higher education.

Second, although the financial crunch facing the higher education's institutions may limit to the number and extent of scholarships and financial aid, they can offer, women cannot do without them. Even if fees are lowered, several of them might find it difficult to expect their family to pay up when jobs have been lost or economic certainty prevails (Maital and Barzani 2020). The universities could initiate discussions to find corporate partners to fund women or atleast offer special loans to women students with minimal or no interest to engage with higher education. Smaller installments spread over a longer period of time, could help. Although banks in several countries offer student loans but it is far from a norm in lower middle and low-income countries and hardly any specific concession is made for women. In addition, NGOs or philanthropic organizations can also be encouraged to do their part in this, for instance, AKHUWAT in Pakistan, has been offering interest free loans for quite some time now for starting off small businesses. Similar models could be used for

providing financial support to women in HEIs. In addition, opportunities for part time paid work, for example internships, or TA-ships or other pedagogical partnerships, some especially for women students could help the universities to get their work done, with minimum cost and support their female population to stay on.

In addition, HEIs in coordination with government and non- government actors also needs to plan other forms of support based on the needs of women. For example, webinars around the topic of time management, especially taking into account their domestic responsibilities, seeking help in the case of domestic violence, noticing signs of abuse in peers and reporting it, and staying connected could be helpful. Reaching out to parents, involving and encouraging them to support the women students with farsightedness is again an important dimension that needs to be taken into account. There is also an urgent need for HEIs to be cognizant of the mental health and wellbeing of women and to be prepared to deal with these issues. Possibilities of engaging with NGOs already working in this area may be a good idea, considering the financial constraints that HEIs are facing. This could open opportunity for consultations with counselors at a wider scale if need be. In addition, ensuring small group discussions, and formation of online peer support groups and faculty support can give women the strength to cope with their higher education.

Furthermore, flexibility in terms of the mode of course delivery is a must. For instance both synchronous but also asynchronous modes of instruction need to be creatively applied, keeping in mind that a large number of women may only have intermittent access to internet facility or computers. HEIs may need to begin their planning with this sense of limitation that women may be facing and find ways to address them. One could explore the possibilities of distribution of Internet devices (if possible), USBs with pre-recorded lectures, followed up by small group tutorials on flexible timings might resolve several issues in this regard. The digital access issue may need collaboration among several actors who can play part by addressing the barriers faced by women (UNESCO 2020d). This may include subsidies and tax incentives by the government that encourage the private sector to develop multiple technological options, while the 'academia and civil society' helps in developing capacity for digital use (ibid).

Lastly, HEIs must not just limit themselves to lecture delivery in offline/ online modalities but also reimagine ways to encourage social networking among student populations and build social and psychological social networks that particularly support women students during this difficult time. They should play their part in creating awareness about the increased risk of violence and how to tackle it during COVID-19 (Usher et al. 2020). This has to be with an understanding that those suffering might not be able to give a distress call and the role of their peers in staying connected, looking out for signs of distress and reporting might be critical (Campbell 2020). Hence, 'Social connectedness' while maintaining social distance is an important strategy in these times (Usher et al. 2020). Without identifying and paying attention to at risk women in higher education, we might witness large numbers of dropouts that foreclose opportunities for this vulnerable section of population. The Goal 17 of SDGs 2030 emphasizes the need to develop partnerships. This is the time for partnerships to be built across HEIs both at national and international level and

across countries to make a concerted effort to ensure that women are able to access and stay in higher education undeterred by the multiple vulnerabilities they face in COVID-19.

5 Conclusion

The COVID-19 devastation has been multisectoral and pervasive, not only threatening life but all aspects of it. The global economy is estimated to shrink by 5.2%—doubling the numbers of those suffering from extreme poverty, and leaving millions jobless in the recession that follows (Buttar 2020). Higher education has been one of the worse hit, affecting millions across the world (UNESCO 2020c). Several HEIs closed down altogether, while a majority tried to move their courses online (Crawford et al. 2020). However, given the digital divide and resource differences across and within countries and regions this has only exacerbated inequalities, even more so for women who have much less access to technology than men (UNESCO 2020d; World Bank 2020). For example 40% of the low-income countries could do very little to support their students during the COVID-19. (Global Education Monitoring Report 2020).In several countries the discrimination and exclusion is deliberate, persistent and now predicted to worsen, especially in relation to women's participation in education (ibid.). UNESCO (2020c) estimates that the largest number of those at highest risk of never returning to higher education are those in HEIs, of which women form a significantly larger part (ibid.). While HEIs struggle to stay afloat, juggling with the multiple demands of the new normal and tough financial constraints, and governments slash the funding of HEIs to pump money into failing health systems and slow economy, the urgency of the issues of women in higher education may be lost, which will directly affect the achievement of Goals 4 and 5 of SDGs 2030 agenda and indirectly make it difficult to achieve all the other SDGs.

This paper highlights the devastating consequences of COVID-19 on women's participation in higher education, as their vulnerabilities become exaggerated. Their relative poverty in relation to men, financial dependency on male family members, lower positioning and valuing in households means that their higher education might no longer be supported as family incomes are lost, reduced or become uncertain. In addition, given the dramatic increase in domestic violence during COVID-19 (UNESCO 2020d; Mazza et al. 2020) poor access to technological resources, demands on their time, expectation of unpaid domestic work, sociocultural norms and learning from history, pressures to marry in uncertain times, are all factors that force women out of higher education. While locality, ethnicity, race, class or disability will configure the nature and extent of issues faced by individual women, these are issues that have been well documented across several regions.

The dropping out of women from HEIs will not only severe their long struggle for inclusion in higher education but also in the wider society—voice, political and economic empowerment. This will be a major setback to the achievement of Goal 4 and Goal 5, of the sustainable development agenda 2030, having a disruptive domino

effect on all the other SDGs 2030. Higher education has been a major driving force in the conceptualization of SDGs and will be in their achievement, given its pivotal role in steering research, innovation, critical thinking and finding sustainable answers to the problems of today. Given the pivotal role higher education in the training of professionals, intellectuals, and shaping of education itself would mean that a loss of footing here, would seriously set the clock back for women and restrict their participation in socioeconomic development processes. Failing to sustain their education would lead to the disengagement of women who form 50% of the population, increase intolerance and worsen the discrimination in society.

The paper recommends that there is an urgent need to recognize the 'equity challenges,' within higher education, in relation to women (Marinoni and Wit 2020), and those which will arise in the larger society, if inequities within education is allowed to fester. HEIs need to recognize and adopt a more sensitive approach to the women students, it is not just their education but their 'lives have been uprooted and left unmoored,' (ibid. p. 2). Hence, the need to go beyond provision of education and to engage with families and communities to understand the nature of the COVID-19 impacts for women that may act as barriers to their education. It is time to reframe and rethink education that is more 'inclusive, flexible and resilient, specifically addressing and ensuring the social and emotional welfare' of all students and teachers (UNDP 2020, p. 3; GEMR 2020), but specifically that of women students. Partnerships as emphasized in Goal 17 of SDGs 2030 may be the key to tackle the 'risk of growing inequalities,' across countries, HEIs and student populations. Forging partnerships with local governments, not for profit and for profit organizations locally and globally, engaging with communities and families, tech companies, can help creative planning of interventions and low cost tech solutions and generate support for women's higher education. These partnerships can allow a collective deliberation on equity, equality and democratic participation (Harkavv et al. 2020, p. 6) and the design of 'equity-oriented policies, frameworks, and targeted funding,' (Marinoni 2020). This however will only be fruitful if they are primarily targeted to ensure women's sustained participation higher education.

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