INTRODUCTION

The female community health volunteers (FCHV) program is one of the most successful initiatives of the health system of Nepal. This program covers 51,416 FCHVs, who provide unparalleled services to help improve outcomes in communicable and non-communicable diseases (NCDs) [1, 2]. A high retention rate, firm public support, and sense of volunteerism that guides social dignity among FCHVs are key factors in their success [3]. Despite doing several revisions over the past decades, there are still a number of challenges such as: ageing volunteers; limited education, high workload/ work burden; inadequate health literacy/ expertise; and often limited health training among FCHVs, which raises concerns over their future [4, 5]. More recently, an addition worry is the inability to enhance skills of FCHVs in digital health technologies [6], this will limit their chances of getting involved in more advanced health care services, which are shaping the future of primary care [7]. Hence some policymakers, practitioners, health managers and other stakeholders have begun to express reservations over the future of FCHVs in Nepal’s health system. As discussions have started and speculations are circulating, and no one single solution stands out, now is the time to consider the key underpinning issues that would inform the most appropriate political decision fit for Nepal’s new federal health system [12].

Options for the way forward

There are three broad solutions circulating in Nepal. First, some suggest limiting the roles of urban FCHVs while strengthening the roles of rural FCHVs [5, 8]. Whereas others are suggesting using FCVHs as health promoters instead of service providers, except in some selected rural areas [9]. Whilst the idea of shifting their work to community nurses and completely phasing out FCHVs has also been circulating. For the sake of completeness there is fourth solution, often favored by politicians, namely to do nothing. However, considering the changes taking place in society, not just the health system, this is not a viable option. Therefore, we’ll focus here on three approaches mentioned in above: (1) develop rural and urban FCHVs separately; (2) change FCHVs to be more like health promoters, perhaps except in some remote rural areas; and (3) abolish FCHVs altogether.

We outline a range of different issues that would need to be considered in the political decisions.

Solution 1: Develop rural and urban FCHVs separately

Many people in urban Nepal don’t know their FCHV. They are more likely to use health care from private health care providers such as pharmacy shops, clinics and hospital. Hence, urban FCVHs have a limited role. Ideas of limiting urban FCHVs and gradually phasing them out has been raised [5, 8]. Before considering this solution, the consequences on the urban poor should be studied, since they are the current beneficiaries of FCHVs services.

Health disparities between rural and urban population is one of the most formidable health system challenges in Nepal [10, 11], and is likely to remain. The incidence of urban poverty in Nepal is around 12.3 percent [12], and number of urban FCHVs is only 5238 [13]. Based on this information it will be ambiguous to imagine the absolute dependency of many urban poor over a few thousands of FCHVs for their health care services. For a moment, if we assume there is a hefty reliance of urban poor on urban FCHVs that would mean a higher work burden for urban FCHVs. However, according to the FCHV National Survey Report 2014 this is not true, as it recognized the limited roles of urban FCHVs and considered gradually phasing them out [3]. Therefore, the suggestions from the survey report along with the argument raised by Tuitui et al. [8] to gradually phase out urban FCHVs should be considered.

While developing efforts to phase out urban FCHVs, a different approach can be taken to strengthen rural FCHVs. Due to their dedicated services and efforts, the rural population has been able to utilize sophisticated health services and resources which have significantly improved national health outcomes [5, 14-16]. Rural FCHVs providing door-to-door health services and performing key roles during crises have raised their image as a treasured health workforce [17]. Unlike urban areas, rural areas in Nepal often have difficult geographical terrains, and lack health facilities and health professionals. Consequently, rural FCHVs most of the time have to provide volunteer services beyond their capacities [14].

In rural Nepal, a FCHV is an influential position, which often serves as an only bridge between health, socio-economic, political, and disaster relief projects and the rural people [5, 9]. Although, involving FCHVs in those diverse projects guarantees success, it often back fires to them creating heavy...
works [18]. As a result, they cannot dedicate sufficient time to provide health services even if they wanted to. The impact of a heavy workload on the performance of FCHVs has not been sufficiently exposed in research-limited settings. Generally, being overworked has a negative impact on the overall productivity of workers [19, 20]. As such, one of the ways to enhance the capacity and work efficiencies of rural FCHVs can be detaching them from other non-health related activities [21]. Given the present context, this strategy seems achievable. Municipalities these days can devise their independent health policies, which can advise stakeholders to restrict the involvement of FCHVs in the sectors other than health. FCHV program and Ministry of Health and Population (MoHP) can help facilitate the discussion on different levels of governments to highlight the importance of this strategy.

Even if the FCHVs are restricted from performing other roles, they might still face too much work. One problem is that various interventions programs have used them to implement their work causing additional burden [8, 9, 17]. In addition, they also spent significant amount of their time to provide services to the non-targeted population, and to submit reports in local health facilities which as per the FCHVs strategy, should be collected by their supervisors [17, 22]. Given the increasing trend of disease burden in rural Nepal the burden for FCHVs is likely to increase in near future.

Contemporary public health studies in Nepal are suggesting upgrading the current programs into integrated FCHV program that includes a continuum of care model integrating all the prenatal, perinatal, and postnatal and child health trainings [9, 23]. Their opinion seems to be irrefutable because in one way this integrated program will substantially increase the cost effectiveness of health programs while in another way it will also reduce the work burden of FCHVs. In addition, studies are also highlighting the benefits of integrating Non Communicable Diseases (NCDs) related trainings and service delivery aspect to the FCHVs program. As they can effectively manage NCDs such as hypertension, diabetes and cardiovascular diseases by using sophisticated technologies in the communities [24, 25]. Therefore, it will be a very good strategy to incorporate NCDs management protocol in the integrated FCHVs program.

Solution 2: FCHVs as health promoters except in some remote rural areas.

Primarily roles of FCHVs are to act as a health promoters, health commodities dispensers and service providers. However, dispensing and service providing jobs occupies much more of their time over shadowing their jobs as a promoters. Their low medical and clinical skill alongside low educational status is creating arguments over their roles as a health commodity dispensers and service providers. In such, limiting their roles as promoters seems ethical, while it will also reduce their work burden. In the context of federalization, local governments can use them to promote health in schools, communities, and workplaces.

Government of Nepal implemented “One Health Worker per School Policy” in 2017 among private schools in Nepal [26]. Recruiting nurses or school based health care workers at schools to fulfill healthcare needs of students is trending in Nepal [27]. This practice is being popular in cities. Soon it will prevail in most rural communities and all over Nepal. One health worker per school is a promising policy to provide school based health care to children. However, given the shortage of nurses in Nepal, school nurses might end up working in multiple schools that might compromise the relevance of this policy. In such, utilizing locally available FCHVs to promote student health by assisting nurses at schools might benefit school based health care in three major ways. At first, they will assist nurses in providing basic health facilities at schools, even if nurses are absent. Secondly, using them voluntarily will not affect the overall financial burden to schools. Thirdly, using them to deliver health campaigns such as deworming, vitamin C, polio etc. at schools will improve health outcomes of a children and community. Use of community health volunteers to assist school nurses is an international practice and has delivered good results [28, 29].

Phasing out FCHVs or limiting their roles as health promoters will be a logical intervention at urban areas. However, given the difficulties associated with rural Nepal, FCHVs need to be empowered and provide with more roles to promote, dispense and provide health services there. The empowerment should focus to improve poor digital health and digital literacy, and to provide health and humanitarian responses during the time of emergencies.

Solution 2.1 Improving digital health and digital literacy

The FCHV Survey Report of 2014 suggest that about 17% of FCHVs are illiterate [5]. Low education levels among FCHVs on one hand hinder their abilities to provide better health counsel, affect record keeping habits and create misuse of health aids [30], whereas on the other hand, it also affect their compliance on digital health. Meanwhile, there has been improvement in the female educational status in Nepal. Literacy rate of adult Nepali female age 15 and above during 2021 was 63 % [31]. FCHVs program should capitalize this achievement by prioritizing the selection of the new rural FCHVs who have completed at least upper primary level of school. In addition, the new integrated FCHV program should also consider incorporating Basic English language, which will ultimately enhance the skill of FCHVs to use modern digital health technologies.

Health and digital health literacy can also be improved by incorporating them in FCHVs basic training modules. At present, FCHVs in Nepal receive only 18 days of basic training in family planning, maternal/newborn/child health, and nutrition issues [9]. Which is sub-standard to the trainings received by community health volunteers in some SAARC countries. In Pakistan, Lady Health Workers (LHWs) receive 15 months of training which combines 3 months of learning in classroom with 12 months of on-the-job training. In addition, training also provides monthly education sessions along with 15 refresher courses on specific topics each year [32]. In India, Accredited Social Health Activist (Asha) workers receive series of trainings for 23 days over one year [33]. While, in Bangladesh Shasthya Shebikas (BRAC female community health volunteers) receive four weeks of training from a local BRAC office in diverse health issues.
[34]. By updating current FCHVs training module to include integrated approaches to community health which include courses in NCDs prevention and management, and digital health literacy can produce better health outcomes.

**Solution 2.2 Engage in disaster risk management**

In rural Nepal, due to the poor infrastructures of disaster preparedness, natural calamities such as earthquakes, landslides and floods along with pandemic diseases such as COVID-19 has always brought bitter experiences. Using volunteers for disaster relief management has been listed as one of the national strategy for disaster risk management [35]. However, there is a lack of coordinated efforts to use FCHVs for disaster risk management [18]. In rural Nepal, FCHVs are in the best position to be the first responders to provide aids and reliefs since they live in a community they serve [18]. Studies conducted aftermath of 2015 earthquakes, suggested FCHVs were able to respond appropriately to the array of health concerns, after receiving trainings and exercises on disaster relief management [18, 36-38]. Whereas, during COVID-19 they were included in a COVID-19 Prevention Group (CPG) which was responsible for the prevention and control of COVID-19 at ward level [39].

Evidence showed, despite being under-resourced, FCHVs has always played important roles during the time of crisis and pandemic. They will perform even better after receiving trainings and capacity building exercises. Rural municipalities now have opportunities to utilize them as regular volunteers for disaster and pandemics preparedness while still using them to provide essential health services at community [40].

**Solution 3: Abolish FCHVs and move to paid health workforce**

This can only be a very long-term decision since rural FCHVs can be the only service providers of local health services [17]. This unlikely to change soon, it is difficult to recruit and sustain health workforce in rural areas as higher salaries and benefits from private jobs have always attracted staff to cities [41]. Under these circumstances, removing rural FCHVs will deprive millions from getting essential health services.

Replacing rural FCHVs with paid health workers has several obstacles. First, recruiting outside staff to work in remote rural areas is difficult. It will be different than that of FCHVs since they volunteer in their local community. Secondly, recruiting paid nurses or midwives to perform the current roles of FCHVs will be very costly to the health system. The third reason why replacing FCHVs with paid health workers will not work is due to the spirit of volunteerism which is linked to their motivation, pride, and prestige in their communities [9, 17, 42-44]. For many being an FCHV brings joy, a sense of freedom, and empowerment. This leads us to the conclusion that only better skilled FCHVs are a suitable replacement for the current ones.

**General considerations**

All three solutions require changes to the current FCHVs. We argue that the best way to make this work is introducing compulsory or voluntary retirement with a decent pension or lump sum. Policies for the voluntary retirement have been in practice for the full time government and private sector for decades [45]. However, FCHVs are recognized as volunteers instead of full-time paid governmental workers which means probably that separate national legislation may need to be passed to include FCHVs in this option. The interim National Development Plan 2007/8 – 2009/10 [46], and National Female Community Health Volunteer Program Strategy 2010 [22] has stressed the provision of honored-farewell to the FCHVs who have served at least for 10 years and are at the age of 60. These documents also highlight about the availability of Rs 50,000 for each VDC to establish FCHVs. Funds. However, at present, a retiring FCHV are getting only Rs 20,000 for thirty years of services which is inadequate [47] -.

Fortunately, after federalism, some local governments have started to address this issue. They are taking good initiative to provide lucrative and reasonable sum to the retiring FCHVs. For example, Bidur Municipality in Nuwakot has recently provided the sum of Rs 100,000 to thirty FCHVs retiring at the age 60. Although, these are the good signs for the future induration of this program, it seems like for the compensation, local government is only considering the age of 60 years as a key criterion for getting benefit. It is worth considering other factors such as years of volunteering, along with learning from international practices on retiring community healthcare workers to decide the final lump sum amount. This also highlights a need of a good policy that will ensure reasonable retirement amount for all FCHVs either through local levels or through central level.

Another way to deal with the situation is to introduce voluntary retirement option with pensions or lump sum amount for the both rural and urban FCHVs. This option can motivate FCHVs who have served for example ten years to choose voluntary retirement. In city areas, this provision might lure the current FCHVs to take voluntary retirement while in the rural areas it might open a space to replace older ones with young, educated, energetic, and skilled ones.

**Footnote: Online news paper article in Nepali at online khabar.com https://www.onlinekhabar.com/2024/01/1423994, Accessed on Jan 27, 2024**

While considering their retirement options with monetary benefits, it will also be worthy to re-consider their current incentives options. Providing monetary benefits to FCHVs has always been the issue of criticism for the health system of Nepal [42]. However, bitter truth is current incentives do not match their efforts and dedication. It will be reasonable to argue that increasing wages will degrade the sense of volunteerism and increase the financial cost of the program [42]. However, when human work-hour is involved, balance between workload and payment is expected. In the context of this program such balance has not been achieved. Consequently, FCHVs are not satisfied with their present financial incentives and reimbursement [47]. Therefore, before moving on with the proposed reforms of the program, it is crucial to introduce new schemes of payments and facilities.

Instead of regular salaries FCHVs can be provided with other financial and non-financial incentives [42]. Financial incentives can include proper allowances as per the work hours they performed, not exceeding 8 hours per day during the weekdays. It will be a no challenge for local health facilities to record the work-hour of their FCHVs. Since...
the program runs through the limited budget, the provincial and local government can help financially to sort out the minimum hourly payment to the FCHVs. In addition, rate of allowances, and facilities such as mobile recharge, internet data packages, and transportation charges should be provided to boost their morale. Moreover, allocations of non-financial incentives such as free medical checkups, free entrepreneurship trainings, awards, and ceremonies can help to sustain the spirit of volunteerism in the FCHVs.

CONCLUSION

The FCHV program has been one of the most successful health programs in Nepal. Due to unaddressed challenges there has been concerns regarding its future. Since the health system has adopted the spirit of the federalization, this might be a good time to reform this popular program. In the urban areas, FCHVs are playing limited roles to provide health care services. Therefore, they should be gradually phase out by introducing compulsory retirement option. Whereas, in the rural areas, educated and digitally skilled women should be given opportunity to become FCHVs. Likewise, efforts should be directed to develop the new integrated rural FCHVs program, which will integrate maternal, child, reproductive health and NCDs related trainings and skills. Importantly, new FCHV’s program should facilitate mechanisms to provide adequate financial and non-financial incentives which will help to sustain the spirit of volunteerism.

REFERENCES

6. Action, B.M., Female Community Health Volunteers Engagement with Communities and the Feasibility of Using Mobile Phones as a Job Aid: A Qualitative Study. 2019.
10. Sharma, S., Health Inequality and Equaty in Rural and Urban Setting in Nepal, 2018
22. Ministry of Health and Population, National Female Community Volunteer Program Strategy


34. Perry, H., et al., Case studies of large-scale community health worker programs: examples from Bangladesh, Brazil, Ethiopia, India, Iran, Nepal, and Pakistan. Afghanistan: Community-Based Health Care to the Ministry of Public Health, 2013.

ACKNOWLEDGMENT
We acknowledge the many discussions with colleagues and friends about FCHVs, their roles, strengths and limitations, and future developments.

AUTHOR CONTRIBUTIONS
Both authors contribute equally to developing this commentary.

FUNDING
No funding available.

COMPETING INTERESTS
All the authors declare no competing interests.