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Impacts of school closures on children in developing countries: *Can we learn something from the past?*

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The Corona crisis has hit education hard worldwide. As of 28 April 2020, school closures affected 1.3 billion learners in 186 countries, or 73.8% of total enrolment. Nearly all African countries are practising country-wide school closures.¹ The current pandemic may cause serious setbacks to the effort to provide education for all.

KEY MESSAGES

- It may be difficult to get children back to school following long-term school closures. Economic reasons are important.
- Young girls are particularly vulnerable. School closures may lead to increase in teenage pregnancies and school dropouts.
- Maintaining learning and links to schools during closures are crucial.
- The benefits of school closures should be balanced against the strong adverse effects.

What happens to children when schools close in developing countries? How many will return after school re-openings? This rapid literature review, carried out in the period 21 April to 5 May, explores experiences from school closures in developing countries, mainly in connection with the Ebola crisis in West Africa. Much has been written about this epidemic. To my knowledge, comprehensive impact studies of the educational sector are few and far between, but I will draw on some findings in a recent review (Hallegarten, 2020).

School “dropouts”?

Keeping pupils in school under Ebola was not an option for a long period of time. Some parents took their children out of school even before they closed and held them back after they reopened, which was also the case in DRC following a later Ebola outbreak there.² The major bulk of the “dropouts” seem to have been girls, although it is difficult to trace the actual figures. Previous experiences have shown that the longer children are out of school, the less likely they are to return (UNICEF, 2015a).

During the Ebola outbreak, the World Bank carried out several waves of phone surveys in Liberia and Sierra Leone. In Liberia it was reported that approximately 25% did not enter school after reopening. According to households with primary school-age children in Liberia, “more than three quarters” returned to school after reopening (World Bank, 2015a: 14). The figure was only slightly lower for older children, 73% (World Bank, 2015a). In Sierra Leone, the share that did not return to school after reopening was 13% (World Bank, 2015b). In both countries, only a small percentage reported that not re-entering was due to fear of infection. The main reasons were economic issues such as inability to pay school fees or the need to generate incomes (World Bank, 2020). Incomplete data makes it difficult to assess how the Ebola outbreak affected enrolment in the long

turn. By 2016/2017 the enrolment rates in both primary and secondary education was higher than prior to the outbreak in Sierra Leone and Liberia. Guinea was then also back to pre-Ebola rates when it comes to primary school enrolment; figures on secondary education are missing.³

Putting adolescent girls at risk: Sexual violence and early pregnancy

UNESCO warns that “Covid-19 school closures around the world will hit girls hardest”.⁴ It is feared that it will lead to increasing “[...] drop-out rates which will disproportionately affect adolescent girls, further entrench gender gaps in education, and lead to increased risk of sexual exploitation, early pregnancy and early and forced marriage.”⁵ These warnings find resonance in the Ebola experience. Studies have found that the closedowns resulted in an increase in physical and sexual abuse and violence and an increase in early pregnancies, especially in Sierra Leone (Rothe et al., 2015; Denney et al, 2015). We have not been able to identify reliable evidence on the magnitude of these effects, however.

A study of how the Ebola outbreak affected 4,700 women in Sierra Leone does however provide suggestive evidence that the magnitude was substantial in some areas (Bandiera et al., 2018). In highly affected areas, the likelihood of early pregnancy increased by ten percentage points relative to areas that were less affected. This is a doubling compared to the baseline. How can this be explained?

The study suggests that several factors were at play, and that school closure may be one of them. Interestingly, the study demonstrates that keeping young girls active in an alternative learning programme for a few hours a week reduced early pregnancy in the highly affected areas. The programme organised clubs providing support and information on health-related issues as

well as vocational training in randomly selected villages during the outbreak. The clubs served as a protective space for young women. They greatly reduced girls' engagement in income generating activities, the time they spent with men, the frequency of unprotected sex, and their likelihood of becoming pregnant. As it was illegal for visibly pregnant women to attend school, it also increased the likelihood of girls returning to school when they reopened.

At the same time, the result that early pregnancies were reduced more in highly affected areas than elsewhere indicates that school closure is not the only factor at play, as schools were closed in all areas. One possible explanation is that girls in these areas to a greater extent were pulled into income generating activities and thereby away from the protective spaces offered by schools (Bandiera et al., 2018).

That girls and women were exposed to vulnerabilities in terms of sexual exploitation during the Ebola outbreak is also documented elsewhere (Denney et al., 2015; UNDP, 2015a and c).⁶ According to UNDP "gender gaps in education have widened with school closures and because of girls' increased dropout rates, owing to teenage pregnancies and early marriages" (UNDP, 2015c: 4). This is claimed to be the case both in Liberia and Sierra Leone. Still, in a Plan International study, large discrepancies between the two countries with respect to whether teenage pregnancies had increased were found: "Very few adult or children's groups in Liberia said that girls were at greater risk of teenage pregnancy, or sexual exploitations and early marriage because of Ebola" (Rothe et al., 2015: 60). In Sierra Leone on the other hand, many adults as well as children believed that teenage pregnancies increased as a result of Ebola. The differences may be linked to variations in research design, since the children's focus groups in Liberia consisted of both genders. The adult groups were split by gender in both countries. In Sierra Leone all groups were split by gender. In both countries school closure is given as an important explanation for teenage pregnancies. The schools served as safe spaces and made the girls less exposed to men (Rothe et al., 2015: 61). The same study found gender differences in home schooling: "[...] in Sierra Leone only 15% of the girls focus groups mentioned participation in home study, as opposed to 40% of the boys groups" (Rothe et al., 2015: 66).

The importance of keeping up learning and links to school under closure

Because of Covid-19, many high-income countries moved classes online within a few days, which was unfeasible for many low-income countries. During the

Ebola outbreak education through broadcasting seems to have been most common, especially educational radio programmes which were aired in Guinea as well as in Liberia and Sierra Leone (UNDP, 2015a), and even "with some demonstration of impact" (Hallegarten, 2020:7). World Bank specialists underscore the importance of keeping up some learning or connection to schools during closure.⁷ But a large share of the children did not engage in any form of home-schooling during the outbreak (Hallegarten, 2020). One study found that in Liberia, only 40% of them did and in Sierra Leone only 30% (Rothe, et al. 2015: 66).

At the university level, alternative educational activities seem to have been scarce. A study of tertiary education in Sierra Leone reveals that students did not benefit from radio- or televised educational lessons to the same extent as school children on lower levels (Jalloh and Raschid, 2018). That extra challenges apply to home-schooling in developing countries is also confirmed in a recent telephone survey studying the impact of Covid-19 in Senegal. 30% of the children did not maintain their education through learning activities (Nestour and Moscoviz, 2020).

During the Ebola outbreak in West Africa, Hallegarten (2020) finds little evidence for extensive use of educational online solutions or mobile-phone technology. However, some school children in Liberia were provided with Rumie Tablets in this period. The Rumie tablet is a low-cost technology with free educational software, which in Liberia was originally intended for a child soldier rehabilitation program in Monrovia. Since the initial programme was closed due to Ebola, the number of Rumies were upscaled and allocated for local school children during the school closure. The learning results were probably positive (Hallegarten, 2020; Moon et al. 2016).

Costs related to school closure and loss of future income

The impact of school closures on future earnings depends on the duration as well as the economic return of education, which again will depend on the quality of education and future employment opportunities. A study covering 61 developing countries finds that one year of lost education is associated with a 6.5% loss in future income (Fink and Peet, 2014). The loss is higher in tertiary education and smaller in primary education. A study from Argentina analysing the long-term impact on future income as a result of lost school days due to teachers' strikes found that even short strikes had a negative effect on expected future incomes (Jaume and Willen, 2019).

Although the magnitude of losses related to the current school closure in sub-Saharan Africa is hard to tell, the cost will probably be high in all countries. Some of the critical consequences may be related to health, water and nutrition.

Critical adverse effects related to school closures: Threats to health and nutrition

As Robert Jenkins, UNICEF's chief of education reminds us: "The closures not only interrupted educational progress; they also curtailed normal social interaction and limited access to essential services families relied on, including school nutrition and health programs, information on disease prevention, and access to clean water and sanitation."⁸ These are important effects of school closures, in addition to increases in violence, sexual abuse, and rising numbers of adolescent pregnancies (Rothe et al. 2015; Mulhern and Walsch, 2019). For many children, schools serve as safe places, which keep them away from child labour and early pregnancies. Social distancing may also cause negative effects on mental health (Lee, 2020; Fisher et al., 2018). The most disadvantaged groups, including children, seem to suffer the most (Fisher et al., 2018; UNDP, 2015b). School meals are an important part of the daily nutritional uptake for many African children. When schools are closed, children may suffer from hunger.

The alleged benefits of school closures to curb virus transmission should be balanced against adverse effects

School closures might have substantial negative socioeconomic consequences. Their impact must nevertheless be contextualised and in particular linked to specific government policies. In addition, educational losses relate to the quality and availability of online education, radio teaching, etc. Before Ebola was eradicated, schools reopened in West Africa with preventive hygienic measures installed. The virus did not flare up again. With reference to the Ebola experiences, it has been suggested keeping the schools open, and instead implement policies to limit the spread of the Covid-19, such as smaller groups and more stringent hygienic measures (Armitage and Nellums, 2020). It could be mentioned that a rapid systematic review of school closure during Covid-19 concludes that it is unclear whether school closures is an effective measure. Predictive models suggest this alone will only reduce the number of deaths by 2-4%. Interventions related to other forms of social distancing seem more effective. This indicates that less disruptive measures should be considered (Viner et al., 2020).

Notes

- ¹ <https://en.unesco.org/covid19/educationresponse> (last visited, 28 April 2020).
- ² <https://theirworld.org/news/ebola-fears-keep-children-off-school-in-drc> (last visited 1 May 2020).
- ³ <http://uis.unesco.org/en/country/gy> (last visited 1 May 2020).
- ⁴ <https://en.unesco.org/news/covid-19-school-closures-around-world-will-hit-girls-hardest>, (last visited 1 May 2020).
- ⁵ <https://en.unesco.org/news/covid-19-school-closures-around-world-will-hit-girls-hardest>
- ⁶ See also report by UNICEF, <https://www.unicef.org/stories/second-chance-schooling-pregnant-teenagers-sierra-leone>
- ⁷ <https://blogs.worldbank.org/education/impact-ebola-education-sierra-leone>, (last visited 1 May 2020).
- ⁸ <https://www.concordmonitor.com/Closing-schools-33403296>, (last visited 26 April 2020).

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