Helpdesk Research Report

Addressing high rates of public service absenteeism

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Question

Please identify recent innovations and emerging best practices in donor approaches to address high rates of public service absenteeism.

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1. Overview

Absenteeism affects a number of different sectors, but literature on public service absenteeism focuses predominantly on health and education. Notably, in recently published literature, there are a number of studies using randomised control trials to test interventions designed to address absenteeism. This helpdesk research report identifies and synthesises the findings of key studies, highlighting which interventions were found to have been effective or ineffective. It is important to note that interventions found to have been effective may not be effective in all contexts. They would not constitute best practice but can help guide policymakers towards interventions that are likely to be effective in the future.

In addition to literature on specific interventions, this helpdesk report also highlights the key messages from guidance material on absenteeism, as well as emerging evidence which identifies factors that contribute towards absenteeism that could be used to inform future interventions.

Addressing absenteeism

Interventions that have been found to reduce absenteeism in certain contexts are primarily monitoring interventions combined with bonuses and fines. The other effective interventions do not provide clear lessons, but it could be concluded that clear, obtainable work goals and clarifying work tasks can, in certain situations, improve attendance. The following interventions have been found to be effective, and are based on separate studies:

- Camera monitoring and financial incentives: Photographing workers at the start and end of the work day, and providing bonuses or fines according to attendance improved attendance.
- Parent monitors: In schools, parent volunteers check teacher attendance at the start, middle and end of the day, resulting in individual and group bonuses for teacher attendance. This was found to reduce absenteeism levels.
- Parent management: In schools, groups of parents take responsibility for contracting and dismissing teachers, monitoring their performance and school maintenance. This resulted in higher teacher attendance levels.
- Smartphone monitoring of monitors: Using smartphones to monitor the location of health worker inspectors increased attendance of the inspectors and attendance of the workers they monitor.
- Student merit scholarships: Providing merit scholarships for students increased class effort overall and also increased teacher attendance.
- Streaming and focusing work: Streaming students into groups based on prior achievement allowed teachers to focus teaching on specific levels and increased teacher attendance.

On the other hand, a number of interventions were tested and found to be ineffective. Ineffective interventions include those that provided financial incentives for the outcome of increased attendance, such as better test scores in schools, or higher shared profit in businesses. The ineffective interventions include:

- Sensitising people to education: Meetings providing information on education and emphasising the importance of education failed to improve teacher attendance.
- Higher-level bureaucrat supervision: Supervision by more senior individuals in the education hierarchy (i.e. district and sub-district administrators) did not improve teacher attendance.
- Financial incentives for test scores: Bonuses for higher student test scores failed to improve teacher attendance.

Guidance literature suggests a number of recommendations for addressing absenteeism. This includes taking a decentralised approach (Deussom et al. 2012) and an experimental (trial-and-error) approach with mechanisms to improve attendance (Rogers and Vegas 2009).

Factors contributing to absenteeism

There a large number of factors that affects absenteeism, including legitimate factors such as workplaces being too remote or dangerous to feasibly travel to. In this brief report it was not possible to provide a comprehensive list. This study identifies a few notable factors from emerging literature that contribute towards absenteeism but have yet to be addressed in effective interventions:

- Political economy and sinecures: Sinecures are salaried jobs with little or no work. These jobs
 are often given in return for political support and can include public service jobs where
 absenteeism is unofficially expected.
- Low pay: This is thought to be a contributing factor to absenteeism, though it is not clear if raising pay will remedy this.
- Job satisfaction: There is a correlation between individuals' job satisfaction and absenteeism.
- **Co-worker satisfaction:** Employees' levels of satisfaction with their colleagues and co-workers is a strong predictor of absenteeism.

2. Addressing absenteeism

In relation to absenteeism in public service the largest range of literature relates to health and education. Banerjee et al. (2008:1) argue that the health and education sectors are "plagued by high provider absenteeism". A survey across several countries involving unannounced visits to primary schools and health clinics found that, on average 19 per cent of teachers and 35 per cent of health workers were absent (Chaudhary et al. 2006). The survey also found that even where providers were present many were not working.

A 2012 systematic review looked at literature relating to the effectiveness of interventions aimed at increasing teacher attendance in developing countries (Guerrero et al. 2012). The review identified nine papers that met the inclusion criteria and were included in the review. These randomised-control trial studies either focused on direct interventions, where the main goal was to reduce teacher absenteeism, or indirect interventions, where reducing teacher absenteeism was an intermediate objective to improve student achievement.

This section identifies interventions that have been tested and identified to be effective or ineffective on absenteeism and includes (but is not limited to) studies identified in the Guerrero et al. (2012) systematic review.

2.1 Effective interventions

Camera monitoring and financial incentives

In a study in India, schools where teachers' attendance was monitored daily using cameras, and their salaries made dependent upon attendance, absenteeism fell by 21 percentage points relative to the non-monitored group (Duflo and Hanna, 2005; Duflo et al., 2012). In the schools where teachers were monitored, a student would take a picture of the teacher and the class at the start and end of the day, and a tamper-proof date and time function was used to verify the time and date. Each teacher received a bonus for each day they attended and a fine for each day they did not attend work.

Parent monitors

A study in Peru found that where teacher attendance was monitored and rewarded financially, teacher attendance improved by 17 days out of the year, compared to the non-monitored group (Cueto et al., 2008). Teacher attendance was monitored three times – one at the beginning, one at the end, and one at a random time – by unpaid monitors who were usually parents. There were individual and group bonuses. Teachers who attained attendance targets received a financial bonus, and there were extra

bonuses for the director and each teacher in a group where at least 80 per cent of teachers in the group achieved the attendance targets.

Parent management

The El Salvador's Community-Managed Schools Programme (or, EDUCO, from the Spanish acronym, Educación con Participación de la Comunidad), which aimed to expand educational coverage in rural areas, indirectly reduced teacher absenteeism in comparison to non-EDUCO schools (Jimenez and Sawada, 1998). Jimenez and Sawada (1998) suggest that this occurred as EDUCO schools are managed by an elected group of parents who are responsible for contracting and removing teachers, monitoring performance, and equipping and school maintenance.

Smartphone monitoring of staff

A study in Pakistan found that monitoring the location of smartphones used by health system inspectors improved performance of health inspectors and increased attendance levels of health workers (Callen et al. 2013). The monitoring was undertaken through an Android-based smartphone application that would transmit data to a central database on the location of health system inspectors. The increased effect was found to be highly localised to constituencies with high levels of political competition.

Student merit scholarships

A merit scholarship programme, giving grants and waiving school fees for high achieving Kenyan girls, also resulted in improved teacher attendance (Kremer et al. 2009). The authors conclude that an increase in teacher attendance is a spillover effect from overall increased class effort. The authors also note that there was evidence of heterogeneity in programme effects, with impact being context-dependent.

Streaming and focusing work

A Kenyan study found that an intervention which streamed students into two groups based on previous academic achievement increased the level of teacher attendance (Duflo et al. 2008). It is not clear what specific factor caused the increase in teacher attendance but the authors highlight that this tracking process would have beneficial to teachers as it helped them focus their teaching to a level appropriate to most students in the class (Duflo et al. 2008).

2.2 Ineffective interventions

Sensitising people to education

In an Indian study, Banerjee et al. (2008, 2010) tested three interventions focused on sensitising people – specifically providing information on education and emphasising the importance. These three interventions failed to reduce absenteeism. These interventions involved providing information on existing education institutions, training community members in a testing tool for children, and training volunteers to hold remedial reading camps.

Higher-level bureaucrat supervision

In a Madagascar study, a package of interventions involving school-level personnel and subdistrict and district administrators was tested. Though it improved the behaviour of teachers and school directors towards more conscientious execution of the tasks for which they are responsible, it did not improve teacher attendance rates (Nguyen and Lassibille, 2008; Lassibille et al. 2010).

Financial incentives for test scores

Several studies tested interventions that provided financial incentives for improved student test performance. In one study the interventions tested involved teachers receiving a bonus for improvement of students' average test scores across schools, or teachers receiving a bonus for improvement in the test scores of students they specifically taught (Muralidharan and Sundararaman 2009, 2011). Another study involved an intervention where teachers and headteachers received gifts if their students scored well in district exams (Glewwe et al., 2010). The interventions tested in these studies failed to improve teacher attendance.

2.3 Guidance material

There is also literature which provides guidance on reducing absenteeism though this is primarily focused on health and education.

In a guidance document, specifically addressing health workforce absenteeism, Deussom et al. (2012) argue that reducing absenteeism requires a decentralised approach involving broad stakeholder groups to address underlying governance issues and reinforce complementary accountability mechanisms. Recommendations for strengthening governance to reduce absenteeism include:

- Setting and adhering to standards.
- Providing adequate incentives.
- Improving information on absenteeism.
- Harnessing political will.
- Committing to enforce disciplinary actions when deemed necessary.

In relation to combatting absenteeism Rogers and Vegas (2009) conclude that there is "no single recipe" but that there are "several ingredients that policymakers should add to the mix" (2009: 26). These are:

- Devote policy attention to the issue of teacher effort. Teacher absence is one indicator of a lack
 of teacher effort, and a reminder that policymakers need to pay attention to both skills and
 effort.
- Measure teacher absence accurately. It is hard to tackle a problem without measuring it.
- Experiment with mechanisms for improving attendance and teacher effort more generally. Monitor and evaluate those experiments carefully. The rigorous evidence on absenteeism and incentives is still too scarce to draw any general lessons about "best practice" policies.

3. Factors contributing to absenteeism

In addition to the evidence which identifies effective (and ineffective) interventions there is emerging evidence on the causes or factors that contribute towards absenteeism. These may provide insights to help design future interventions.

Political economy and sinecures

A Pakistan study, analysing quantitative data, found that doctors were more likely to attend work when they are working in a constituency with high levels of political competition¹, and when they do not know their local parliamentarian personally (Callen et al., 2013). The study also found that where employee absence was highlighted to senior officers there were only subsequent decreases in attendance in the constituencies with high levels of political competition. The authors attribute this absenteeism to patronage. Doctors are absent and unavailable to provide health care because their positions are sinecures – positions that require little or no work but provide a salary – and have been provided in return for political support.

Low pay

In assessment of whether absenteeism along with other types of corruption can be blamed on low pay, Savedoff (2008) argues that increasing wages is not likely to make any difference without some form of monitoring and a real chance of penalties. He notes an Argentinian study which finds that there was in general no statistical relationship between pay and corruption but higher wages did reduce corruption (but not specifically absenteeism) in the presence of moderate intensities of auditing (Di Tella and Savdeoff 2001, 2003).

Job satisfaction

A number of studies find a correlation between low levels of job satisfaction and higher absenteeism (e.g. Hardy et al. 2003; Obasan Kehinde 2011). However, this helpdesk query has not been able to identify evidence of effective interventions that reduce absenteeism through increased job satisfaction.

Co-worker satisfaction

In a study, based in the English speaking Caribbean, of the relationship between different attitudinal factors and absenteeism a number of predictive factors were identified. Levels of work activity, responsibility, job security, and loyalty to the organisation, are related to absenteeism but the most important single predictor of absence was employee's levels of satisfaction with co-workers (Punnett et al., 2007). The authors conclude that these findings are similar to results found in past research in the developed world.

Prosocial motivation

In a blog on public service, McCourt (2013) highlights a potential role for prosocial motivation – the desire to help others – in improving public service provision, including addressing absenteeism. He highlights two studies. The first study demonstrates how fundraisers' performance improved after meeting someone who benefited from the scholarship they were fundraising for, whereas previous cash prize

¹ Political competition was based on the vote shares for each party and the victory margin for the winning candidate as a share of total votes cast in the local election.

incentives had failed to improve performance (Grant et al., 2007). The second study highlighted how doctors and nurses hand-washed more when signs were put up highlighting the infection risk to patients, whereas the signs highlighting infection risks to doctors and nurses themselves had been ineffective (Grant and Hofman, 2011). McCourt (2013) suggests that rather than reform pay to reform public sector practice, interventions that build on prosocial motivation may be a relevant focus in future.

4. References

- Banerjee, A., Banerji, R., Duflo, E., Glennerster, R., & Khemani, S. (2008). *Pitfalls of participatory programs: evidence from a randomized evaluation in education in India*. Working Paper No. 14311. Cambridge: NBER. http://www.nber.org/papers/w14311.pdf
- Banerjee, A. V., Banerji, R., Duflo, E., Glennerster, R., & Khemani, S. (2010). Pitfalls of Participatory Programs: Evidence from a randomized evaluation in education in India. *American Economic Journal: Economic Policy*, 2(1), 1-30. http://pubs.aeaweb.org/doi/pdfplus/10.1257/pol.2.1.1
- Callen, M., Gulzarz, S., Hasanain, A. & Khan, Y. (2013). *The Political Economy of Public Employee Absence:* Experimental Evidence from Pakistan. University of California, San Diego. http://econ.ucsd.edu/~mjcallen/pdfs/pea.pdf
- Chaudhury, N., Hammer, J., Kremer, M., Muralidharan, K., & Rogers, F. H. (2006). Missing in action: teacher and health worker absence in developing countries. *The Journal of Economic Perspectives*, 20(1), 91-116. http://pubs.aeaweb.org/doi/pdfplus/10.1257/089533006776526058
- Cueto, S., Torero, M., León, J., & Deustua, J. (2008). *Asistencia docente y rendimiento escolar: el caso del Programa* META. Peru: Grupo de Análisis para el Desarrollo (GRADE). http://dide.minedu.gob.pe/xmlui/bitstream/handle/123456789/158/067.%20Asistencia%20docente %20y%20rendimiento%20escolar%20el%20caso%20del%20Programa%20META.pdf?sequence=1
- Deussom, R., Jaskiewicz, W., Dwyer, S., & Tulenko, K. (2012). *Holding Health Workers Accountable: Governance Approaches to Reducing Absenteeism.* CapacityPlus Technical Brief 3. IntraHealth
 International, Inc. http://www.intrahealth.org/files/media/holding-health-workers-accountable-governance-approaches-to-reducing-absenteeism/holding-health-workers-accountable-governance-approaches-reducing-absenteeism.pdf
- Di Tella, R. & Savedoff, W. (eds.). (2001). *Diagnosis corruption: Fraud in Latin America's Public Hospitals*. Inter American Development Bank: Washington, DC.
- Di Tella, R. & Savedoff, W. (2003). The Role of Wages and Auditing during a Crackdown on Corruption in the City of Buenos Aires. *Journal of Law and Economics* 46(1), 269-92. http://www.jstor.org/stable/10.1086/345578
- Duflo, E. & Hanna, R. (2005). *Monitoring works: getting teachers to come to school*. Working Paper No.11880. Cambridge: NBER. http://www.nber.org/papers/w11880.pdf
- Duflo, E., Dupas, P., & Kremer, M. (2008). *Peer effects, teacher incentives, and the impact of tracking:* evidence from a randomized evaluation in Kenya. Working Paper No. 14475. Cambridge: National Bureau of Economic Research. http://www.nber.org/papers/w14475

- Duflo, E., Hanna, R., & Rya, S. P. (2012). Incentives work: Getting teachers to come to school. The American Economic Review, 102(4), 1241-1278. http://pubs.aeaweb.org/doi/pdfplus/10.1257/aer.102.4.1241
- Glewwe, P., Ilias, N. & Kremer, M. (2010). Teacher incentives. American Economic Journal: Applied Economics 2: 205-227. http://pubs.aeaweb.org/doi/pdfplus/10.1257/app.2.3.205
- Grant, A. M., Campbell, E. M., Chen, G., Cottone, K., Lapedis, D., & Lee, K. (2007). Impact and the art of motivation maintenance: The effects of contact with beneficiaries on persistence behavior. Organizational Behavior and Human Decision Processes, 103(1), 53-67. http://dx.doi.org/10.1016/j.obhdp.2006.05.004
- Grant, A. M., & Hofmann, D. A. (2011). It's Not All About Me Motivating Hand Hygiene Among Health Care Professionals by Focusing on Patients. Psychological science, 22(12), 1494-1499. http://dx.doi.org/10.1177/0956797611419172
- Guerrero G., Leon J., Zapata M., Sugimaru C., & Cueto S. (2012). What works to improve teacher attendance in developing countries? A systematic review. London: EPPICentre, Social Science Research Unit, Institute of Education, University of London. http://r4d.dfid.gov.uk/pdf/outputs/systematicreviews/Q39Teacher_attendance_2012Guerrero.pdf
- Hardy, G. E., Woods, D., & Wall, T. D. (2003). The impact of psychological distress on absence from work. Journal of Applied Psychology, 88(2), 306. http://dx.doi.org/10.1037/0021-9010.88.2.306
- Jimenez, E. and Sawada, Y. (1998). Do community-managed schools work? An evaluation of El Salvador's EDUCO Program. Working Paper Series on Impact Evaluation of Education Reforms No. 8. Washington, DC: World Bank. http://siteresources.worldbank.org/EXTGOVANTICORR/Resources/3035863-1291223960989/El_Salvador_Education_Decentralization.pdf
- Kremer, M., Miguel, E. and Thornton, R. (2009). Incentives to learn. Review of Economics and Statistics 91(3), 437–456. http://www.mitpressjournals.org/doi/pdf/10.1162/rest.91.3.437
- Lassibille, G., Tan, J. P., Jesse, C., & Van Nguyen, T. (2010). Managing for results in primary education in Madagascar: Evaluating the impact of selected workflow interventions. The World Bank Economic Review, 24(2), 303-329. http://wber.oxfordjournals.org/content/24/2/303.full.pdf+html
- McCourt, W. (2013) How can public service providers do better? Pay versus 'prosocial motivation'. Governance for Development. Blogs.worldbank.org. Washington D.C.: World Bank. http://blogs.worldbank.org/governance/how-can-public-service-providers-do-better-pay-versusprosocial-motivation
- Muralidharan, K. and Sundararaman, V. (2009) Teacher performance pay: experimental evidence from India. Working Paper No. 15323. Cambridge: NBER. http://www.nber.org/papers/w15323.pdf
- Muralidharan, K. and Sundararaman, V. (2011). Teacher Performance Pay: Experimental Evidence from India. Journal of Political Economy 119 (1) 39-77. http://www.jstor.org/stable/10.1086/659655

- Nguyen, T. and Lassibille, G. (2008) *Improving management in education: evidence from a randomized experiment in Madagascar*. Poverty Action Lab. http://www.povertyactionlab.org/sites/default/files/publications/93_Nguyen_Improving_Management.pdf
- Obasan Kehinde, A. (2011). Impact of Job Satisfaction on Absenteeism: A Correlative Study. *European Journal of Humanities and Social Sciences Vol, 1*(1). http://www.journalsbank.com/ejhss_1_3.pdf
- Punnett, B. J., Greenidge, D., & Ramsey, J. (2007). Job attitudes and absenteeism: A study in the English speaking Caribbean. *Journal of World Business*, *42*(2), 214-227. http://dx.doi.org/10.1016/j.jwb.2007.02.006
- Rogers, F. H., & Vegas, E. (2009). *No more cutting class. Reducing Teacher Absence and Providing Incentives for Performance*. World Bank Policy Research Working Paper, 4847. http://www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2009/02/26/000158349_20090226142341 /Rendered/PDF/WPS4847.pdf
- Savedoff, W. (2008). Pay for Honesty? Lessons on Wages and Corruption from Public Hospitals. U4 Brief 2008:13. Bergen, Norway: Chr. Michelsen Institute. http://www.u4.no/publications/pay-for-honesty-lessons-on-wages-and-corruption-from-public-hospitals/downloadasset/99

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