

'Our village is dependent on us. That's why we can't leave our work'. Characterizing mechanisms of motivation to perform among Accredited Social Health Activists (ASHA) in Bihar

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Abstract

Community health workers (CHWs) play major roles in delivering primary healthcare services, linking communities to the formal health system and addressing the social determinants of health. Available evidence suggests that the performance of CHW programmes in low- and middle-income countries can be influenced by context-dependent causal mechanisms such as motivation to perform. There are gaps regarding what these mechanisms are, and what their contribution is to CHW performance. We used a theory-driven case study to characterize motivational mechanisms among Accredited Social Health Activists (ASHAs) in Bihar, India. Data were collected through semi-structured interviews with CHWs and focus group discussions with beneficiary women. Data were coded using a combined deductive and inductive approach. We found that ASHAs were motivated by a sense of autonomy and self-empowerment; a sense of competence, connection and community service; satisfaction of basic financial needs; social recognition; and feedback and answerability. Findings highlight the potential of ASHAs' intrinsic motivation to increase their commitment to communities and identification with the health system and of programme implementation and management challenges as sources of work dissatisfaction. Efforts to nurture and sustain ASHAs' intrinsic motivation while addressing these challenges are necessary for improving the performance of Bihar's ASHA programme. Further research is needed to characterize the dynamic interactions between ASHAs' motivation, commitment, job satisfaction and overall performance; also, to understand how work motivation is sustained or lost through time. This can inform policy and managerial reforms to improve ASHA programme's performance.

Keywords: Accredited Social Health Activists, community health workers, India, mechanisms, work motivation, theory-driven evaluation

Introduction

The 2018 Astana Declaration calls for strengthening the capabilities of low- and middle-income countries (LMICs) to deliver comprehensive primary healthcare (PHC; WHO, 2018). High-performing PHC

systems can play a central role in achieving the Sustainable Development Goals in the era of Universal Health Coverage (Hone *et al.*, 2018) and in addressing pandemics and public health emergencies (WHO, 2011).

Key Messages

- Evidence from a theory-driven exploratory study in eight sub-districts in Bihar, India, identified causal mechanisms of motivation that drive Accredited Social Health Activists' (ASHAs) job satisfaction, engagement and performance.
- Five mechanisms were identified. Two were intrinsic (autonomy and empowerment; and competence, connection and community service); and two extrinsic (satisfaction of basic financial needs, social recognition, and feedback and answerability).
- Findings indicate that although ASHAs are intrinsically motivated and highly committed to local communities, and that implementation challenges in Bihar's ASHA programme have led to widespread dissatisfaction with their working conditions and incentives.
- Innovations in human resource and performance management are needed to nurture and sustain intrinsic motivational mechanisms and improve the performance of Bihar's primary healthcare system.
- Further research needs to address how mechanisms of ASHA motivation to perform are triggered, sustained and/or lost.

In the last few decades, community health worker (CHW) programmes have become a cornerstone in the organization of PHC delivery in most LMICs and a key determinant for health systems' performance (Lewin *et al.*, 2008; Rohde *et al.*, 2008; WHO, 2016). The evidence on CHW programme performance indicates that their effectiveness is influenced by a combination of technical and contextual factors (Naimoli *et al.*, 2014; Ballard and Montgomery, 2017). The former include, among others, training and availability of supplies (Kane *et al.*, 2010; Lewin *et al.*, 2010; Kok *et al.*, 2015a; Scott *et al.*, 2018); the latter may refer to health workers' motivation (Willis-Shattuck *et al.*, 2008; Gopalan *et al.*, 2012), incentives (Lohmann *et al.*, 2018a; Gergen *et al.*, 2018b), support from and integration with the formal health system (Zulu *et al.*, 2014) and closeness to communities (Theobald *et al.*, 2016).

Several studies have suggested that context can influence CHWs' motivation (Kane *et al.*, 2010; Kok *et al.*, 2015a, 2017). In healthcare settings, work motivation has been defined as the 'willingness to exert and maintain an effort to succeed at work, achieve the organization's goal or to help the team reach its goals' (Franco *et al.*, 2002). From an organizational behaviour perspective, Pinder (2008) defined work motivation as 'a set of energetic forces that originate both within as well as beyond an individual's being, to initiate work-related behaviour, and to determine its form, direction, intensity, and duration'.

Environments that effectively influence healthcare workers' motivation to perform can increase job satisfaction and organizational commitment, sustain the retention of skilled workers, and contribute to improved performance (Vujicic and Zurn, 2006; Peters *et al.*, 2010; Kok *et al.*, 2015c; Vareilles *et al.*, 2015b; Gergen *et al.*, 2018b; Lohmann *et al.*, 2018b). However, understanding how programme implementation contributes to such effects or not remains an evidence gap in health systems and policy research.

Methods

Policy and programme context

Since 2005, under its National Health Mission (NHM), India has developed one of the largest CHW programmes in the world. A cadre of ASHAs was established for the dual role of providing health services to rural communities and to serve as a linkage with the formal health system. Currently, the ASHA programme is present in most Indian villages and boasts a nominal capacity of approximately 1 million CHWs (Ved *et al.*, 2019).

In Bihar—one of India's poorest states with some of the worst infant and maternal mortality and fertility indicators (Ministry of

Home Affairs, Government of India, 2015), the ASHA programme plays a pivotal role in the provision of outreach reproductive, maternal, newborn and child health and nutrition (RMNCHN) services. ASHAs' work complements that of other cadres of female CHWs, such as Anganwadi workers (AWW) and Auxiliary Nurse Midwives (ANM). A 2011 study of the ASHA programme in Bihar and four other Indian states identified implementation challenges such as insufficient levels of incentives and compensation and lack of reliable support and supervision (Bajpai and Dholakia, 2011). Subsequent studies across India have consistently found similar issues and have led to calls for reforming the ASHA programme to enhance their motivation and capability to contribute to PHC system's performance (Gopalan *et al.*, 2012; Kumar *et al.*, 2012; Saprii *et al.*, 2015; Singh *et al.*, 2017; Lyngdoh *et al.*, 2018; Mondal and Murhekar, 2018).

In 2010, the Government of Bihar (GOB) launched the *Ananya* programme to improve population-level maternal, neonatal and child health. This program was implemented in eight districts and was followed in 2014 by the Bihar Technical Support Program (BTSP), introduced to support the GOB with technical assistance in areas such as human resources and supply chain management, health information systems and PHC service delivery. The recipients of technical support are State, district and sub-district managers, technical officers and PHC facility-based providers. Assistance is delivered through a Technical Support Unit staffed by CARE India and embedded within Bihar's healthcare agencies. A specialized Measurement and Learning Unit collects, analyses and synthesizes district-level progress in RMNCHN indicators. Such data are provided to GOB officials to support the provision of feedback to PHC facility managers and providers for purposes of training, mentoring and service delivery quality improvement (Kaur *et al.*, 2019).

Although BTSP does not provide direct assistance to the ASHA programme, it does indirectly support it through the provision of district-level RMNCHN data to officials in charge of CHW programme monitoring. Interactions between the various cadres of CHWs and their supervisors take place at regularly scheduled health sub-centre (HSC) meetings at sub-district level. Here, CHW supervisors appraise CHW performance using State- and BTSP-generated RMNCHN information.

Study design

In the last 10 years, there have been more than a hundred studies focused on India's ASHA programme (Ved *et al.*, 2019). Few have addressed the issue of motivation and none, to our knowledge, has specifically characterized the mechanisms of motivation among

ASHAs. In this study, we aim to characterize such mechanisms as ASHAs engage with, and are affected by, the implementation of Bihar's CHW programme. We also aim to identify the proximal effects that such motivational mechanisms have on ASHAs' work attitudes and behaviours. To achieve such aims, we used a theory-driven, case-study design. Between June and August 2018, we conducted 20 semi-structured interviews with ASHAs and four focus group discussions (FGDs) with 32 beneficiary women.

Data collection and analysis

The sampling strategy was designed based on the concept of information power, which guides non-probabilistic, purposive sampling, to effectively reach saturation (Malterud *et al.*, 2018). We analysed the indicators regularly collected by BTSP to purposely selected two districts with similar RMNCHN performance. We then identified four sub-districts located in each district's northern, southern, western and eastern regions. This helped us diversify our sample and enhance sub-district-level representativeness.

The selection of participant ASHAs was made based on seniority, to maximize the number of years of experience and to ensure that all respondents had developed familiarity with the work environment and the health system at large. Beneficiaries' participation in FGDs was based on being registered in the PHC centre's rosters and having been pregnant or having a live-birth during the previous 12 months. This was an indication of recent exposure to CHWs services. We chose FGDs to collect beneficiaries' information because they are ideally suited to explore a specific common experience of interest (Patton, 2014); in this case, we sought previous exposure to ASHA-delivered antenatal care, delivery referral and/or post-partum care. No payment was made for participation in the study.

Interviews with ASHAs sought to explore their motivation for joining this cadre of CHWs; their roles and responsibilities; relations with supervisors, the community and other CHWs; and the sources of satisfaction and frustration when executing their work. Interviews also explored the process through which respondents acquired, maintained and/or improved the knowledge and skills required to perform their tasks. Probes generated examples about day-to-day interactions with family, beneficiaries and health system actors such as supervisors, medical officers and sub-district officials. We also probed into the perceived effects of these interactions on respondents' motivation and job satisfaction. FGDs explored beneficiaries' perceptions about their interactions with ASHAs, their roles in their communities and satisfaction with their services. All interviews and FGDs were conducted in local languages by expert interviewers and were professionally translated and transcribed into English. Interviews and FGD guidelines are available on [Supplementary File S1](#).

Data were coded using a combined deductive and inductive structure followed by thematic analysis. The deductive coding structure was derived from the social science theory and evidence discussed below. Inductive codes emerging from the transcripts were also included in the analysis. The data from FGDs were used to triangulate the themes emerging from the CHW transcripts, where applicable. Coding was done by two of the authors with validity checks conducted by the first author. Data were analysed using NVivo, version 12. To increase the validity of the study in terms of reflexivity, credibility and confirmability, and to enhance the trustworthiness, transparency and accountability of the research, investigators maintained 'personal biases memos' that recorded all self-identified biases and pre-conceptions that may have affected the research process (Finlay, 2002). All study files were preserved to provide a verifiable audit trail.

Programme theory

Mechanisms in social science aim to explain how policies and programmes work, or not, and why. Mechanisms are 'underlying entities, processes, or structures which operate in particular contexts to generate outcomes of interest' (Astbury and Leeuw, 2010). We chose two complementary theoretical approaches to motivation. Rational choice theory explains motivation as the result of individual actors' decisions to maximize utility through externally regulated means (Elster, 1986; Boudon, 2003), such as financial incentives and rewards. We also used self-determination theory given its focus on explanations of work motivation (Deci and Ryan, 2000, 2008) and its empirical validation across multiple contexts including a small, but growing, evidence base in LMICs (Gagné and Deci, 2005; Gagné and Forest, 2008; Dieleman *et al.*, 2009; Kane *et al.*, 2010; Kok *et al.*, 2015d; Strachan *et al.*, 2015; Vareilles *et al.*, 2015b; Lodenstein *et al.*, 2017; Vareilles *et al.*, 2017; Hamal *et al.*, 2018). According to self-determination theory, work motivation can range from controlled or passive acquiescence to externally determined rules, to autonomous valuing of intrinsic interest in one's work (Rigby and Ryan, 2018). Contextual conditions and managerial practices that support workers' basic psychological needs for autonomy, competence and relatedness can, in turn, contribute to self-motivation, job satisfaction and organizational commitment (Gagné and Deci, 2005; Deci *et al.*, 2017). External regulations such as rewards, incentives and positive feedback, among others, can also satisfy the needs for competence, autonomy and relatedness if/when these become internalized by workers. When this happens, external motivators are integrated into an individuals' own personal values and self-motivation, thus contributing to job satisfaction, organizational commitment and work performance (Fernandez and Moldogaziev, 2013). Column 1 in Table 1 summarizes key concepts in self-determination theory (Rigby and Ryan, 2018) and column 2 presents the authors' assumptions regarding their implications for ASHAs motivation and work behaviours.

Based on the above, the propositions to be empirically tested were: ASHAs' individual performance would be proximally contingent on (1) Bihar's PHC system organizational environment; (2) local socio-cultural context; and (3) the implementation of Bihar's ASHA programme. Context would mediate the triggering (or not) of two types of motivational mechanisms: (1) extrinsic motivation, through the satisfaction of financial needs, social recognition and by external pressures to account for productivity; and (2) intrinsic motivation, through the desire to acquire and use new knowledge and skills; a sense of being fairly treated; and by the satisfaction of basic psychological needs of autonomy, competence and relatedness. Furthermore, we expect these motivational mechanisms could lead to proximal outcomes such as (1) increased ASHAs' job satisfaction and commitment to community and identification with the PHC system; and (2) increased perceived satisfaction with, and stature of, ASHAs among beneficiaries. Such proximal effects would be necessary conditions for the generation of ASHA performance, defined as a combination of task completion, aggregate productivity and quality relations with the community.

Results

The median length of experience among ASHAs in our sample was 12 years. We identified five motivational mechanisms operating at the individual ASHA level, including (1) satisfaction of a sense of autonomy and self-empowerment; (2) satisfaction of a sense of

Table 1 Basic psychological needs theory and implications for CHW motivation

Basic needs	Definition	Implications for CHW motivation to perform
Autonomy	A sense of having ownership of and choice in one's work.	Helping CHWs feel that their tasks are important and meaningful, even when choices are limited. Choices may include a variety of performative behaviours, such as full-performance, shirking, non-performance or abandoning their jobs.
Competence	A sense of feeling effective, achieving growth and success.	Providing opportunities to CHWs for acquisition of skills, stretching their abilities, and growing through new challenges and responsibilities.
Relatedness	A sense of belonging to and being supported by an organization and feeling connected to others.	Developing psychological attachment to and service to community and beneficiaries and identification with the PHC system. Desire to feel respected and appreciated by their supervisors and to be connected and interact with their peers.

competence, connection and community service; (3) social recognition; (4) satisfaction of basic financial needs; and (5) feedback and answerability. The first two are intrinsic drivers of motivation to perform, whereas the other three are extrinsic.

Motivation by a sense of autonomy and self-empowerment

The majority of ASHAs highlighted the satisfaction felt by being able to work outside their homes. This not only triggered a sense of autonomy and self-empowerment but also enhanced their ability to perform their work. One ASHA described, 'See, one can do the social work in any manner. So, I joined this. I can meet new people and come out of the house . . . So, that was only in (my) mind. That I wanted to do something. Go out of the house and serve people'.

As women who work in the community, they see themselves not only as providers of community services but also as individuals who have acquired a heightened level of community standing. 'Before, people said 'His wife is going.' Now they don't think so. Now they say ASHA Didi is coming'. Furthermore, although ASHAs initially saw themselves as 'daughters of the village', they now also identify themselves with the role of healthcare workers. An experienced ASHA described this sense of identity, 'I am first a health worker. I think society is for me. I will create awareness, solve the problems of others. If I become a daughter-in-law first, then I will not be able to work like this'.

The emergence of a healthcare worker identity has empowered individual ASHAs and allowed them to distance themselves from socially held normative behaviours. Such gains in agency have provided ASHAs with opportunities to effectively use their skills in community settings. An ASHA provided an example, 'I say: who has the condoms which (they) come for? For boys and girls? It's not written here (that) unmarried boys cannot take it. So, whoever wants to use it, should take it from me. If they ask me for it, what do I do? I give it, so that unmarried girls don't face any embarrassment. I laugh at this, so others say, "She is shameless. She does not feel shy about such things". But I say, if health department has made me ASHA worker, I should not feel any shame in this work'.

Motivation by the satisfaction of a sense of competence, connection and community service

Respondents described in detail the improvements they have witnessed in their villages and give themselves credit as contributors to such change, 'There has been a major change, madam. We educate them so that there should be a gap of at least 3 years between 2 kids and take them for check-ups. If the blood is less, we administer the intake of calcium and iron tablets'.

The majority of ASHAs indicated that working in close proximity to their community has satisfied in them a sense of service and

altruism. 'I wanted to help others. . .I wanted to give the villagers a better life'. Beneficiary women value such contributions to village well-being, 'She (ASHA) is always there for us; she always stands when in need; she always visits us and asks our problems and issues, gives us injections and all. And if something is not available then she gets it for us'.

Being an ASHA has also provided opportunities for acquiring new technical skills that have allowed respondents to be effective in their work. In general, ASHAs identified in-service training as a valued input for their self-improvement, 'Trainings are important. Just like without studies one cannot pass the exam. Like this, without training, we are unable to do any work. In training, we get to learn about the work so that we can do it properly'.

Furthermore, most respondents valued the acquisition of new knowledge because of the sense of competence they gained from such opportunities. One ASHA reflected on the sense of competence that she has internalized, 'Nothing is a challenge for me. I can do any work at a click of the fingers. It's so because I have lots of confidence. . . I have answer to all questions. I give answer with evidence. People may think me wrong or bad, but I am not dependent on anyone. But I am proud of myself. I compete with myself, not with other ASHAs'.

Respondents greatly valued the provision of job aids in helping them to improve the execution of their duties and further increase their sense of competence. For example, the extensive use of a mobile health platform aimed at improving the interactions between ASHAs and their customers ('Mobile *Kunji*') was perceived by respondents as helpful in improving their ability to reach out and disseminate health information to customers. '(Training) helps us out immensely in our work because we get the opportunity to gain knowledge. . . Women didn't use to take us that seriously. So, mobile Anita, Doctor Anita recordings, we used to play in front of them, so that they consider what we say'.

All respondents appreciated the social nature of the weekly ASHA meetings and felt energized by the connection to their peers, 'I like meeting the most (. . .) we get to know about information both new and old about caretaking process. So I like the meeting part the most. They speak about how to do that, why to do that etc., and we get the information from here only'. Meetings appear to have become a source of emergent, informal communities of learning and peer-to-peer support, 'Suppose I don't have any information, so we discuss with each other. So, we get to learn new things from each other. Suppose she is doing any mistake, then we can give advice to her'.

In order to ensure that their work is completed, and to prepare for the meeting, informal 'meetings before the meeting' have organically developed. In such gatherings, high-performing ASHAs are sought out for help and guidance, and there is continuous peer-to-peer learning. These informal spaces appear to have emerged in

response to the demands for accountability that have been placed on ASHAs (below), ‘Whenever there are meetings... they ask stuff which they are not aware of... they help solve each other’s problems. (And this) can affect the work. There is a mild sense of competition’.

Motivation by social recognition

For ASHAs, the progressive gains in credibility among the community appear to have generated an internalized perception of social recognition. This may have increased their legitimacy as service providers and their social standing in the community; this may further reinforce their emergent identity as healthcare workers. Most respondents stated that people in the community look up to, and respect them, ‘The fact (that) the village is happy and I am respected makes me very happy. The money is not an issue. Whether it be higher or lower, I am respected in society (and it) helps me feel good about myself. That is why I am still working for ASHA’. Beneficiary women ratified these perceptions, ‘ASHA is very helpful for us, she gets medicine, helps in child birth, calls ambulance, gets medicine. It’s very good that we have ASHA in our village’.

Very few respondents reported having experienced public recognition by supervisors. One ASHA reported feeling proud in response to positive feedback from a high-ranking Official, ‘He asked me, “What happens when toilets are not cleaned?” I said, “Flies from the toilet will sit on the ingredients and spread infection in the food. So, food becomes contagious”. He asked “Who will eat it?” I said, “Both you and I”. He started laughing. He said, “In (location masked) only she can answer my questions. Don’t others know about all this?” I really felt very proud that day’.

Motivation by satisfaction of basic financial needs

All respondents reported feeling satisfied by the ability to bring money to their households, a motive that appears to create a virtuous cycle with the mechanism of autonomy and empowerment described above, ‘The benefit is that I earn money through this. Though it is less, it doesn’t matter, as I don’t have to beg in front of anyone. Now I don’t have to ask for money to my husband’.

Working as an ASHA has provided access to opportunities that would otherwise be absent from their lives. Some respondents derived deep satisfaction from the ability to use their earnings to educate their children, ‘And from the money that I get, I have started educating my children, and save some money’. Also, referring to the reasons why young women in her village would want to become an ASHA, a respondent reflected, ‘I suppose they think too that, ... if they go out and become one (ASHA), they are probably going to make some money. What benefits you get if you stay at home always? Everyone likes money, and if you go out, you get that’.

But, having a job as an ASHA and being paid for it have not worked as expected. All ASHAs interviewed expressed dissatisfaction with the payment system as it is currently implemented in Bihar, ‘See Didi, I don’t think that this work is very good. Like, we travel a lot in the field, but still we are not getting our money. So, our heart breaks. We are working so hard, and still not getting our money. So, why should that be?’

Another source of dissatisfaction with the ASHA programme’s financial arrangements arises from the perceived sense of unfairness generated by the discordance between the small amount of payment received and the substantial responsibilities and workload involved. According to the respondents, the amounts paid to ASHAs have remained unchanged. ‘From 2007 to 2018, we only get 600 rupees. But with the rise of the prices, we see that it does not suffice.

In 2007 it was fine, but with the rise in prices it is not possible in today’s date’. Moreover, as incentive payments to ASHAs are conditional on customers’ behaviours, whenever a client decides, for instance, not to deliver in a public facility, ASHAs face financial losses. One respondent described how financial incentives operate, ‘Only if we work, we get the remuneration. Even if it is at midnight, we have to go, because the nature of the work is that. If we do not help, and they do go to a private hospital, our remuneration is lost’.

Given that household decisions about place of delivery are not under the ASHAs’ control, losing a client to the private sector becomes a source of distress for them. This further contributes to the perception of a sense of unfairness in their relations with the formal health system, and has triggered the conviction among many respondents that any work performed should be recognized and unconditionally paid. ‘The ASHA member gets sad that, even after working, if a person runs away, then what to do? The entire work goes in vain! Therefore, we say that we should be paid for whatever work we do... I just want to say that one should be paid for the work one has done’.

Another source of growing discontent for ASHAs is the unpredictability in public sector priorities and related increases in workload. Changing priorities at the federal and state level have led to the launch of new ASHA-led, community-based initiatives and programmes. Among these, respondents described those they particularly disliked, including campaigns to control open defecation, data collection for various surveys and voter registration drives. ‘Workload has increased now. We have to take care of the toilet facilities as well. We go to farms in the morning at 4 to check whether someone is doing it there or at road. We check till 8 at night’. Further complicating their work and livelihood, the unpredictability in payment schedules also appears to affect beneficiaries that deliver in public sector facilities. As an ASHA described it, ‘I have complained to the head of the health sub-centre. “If you don’t want to pay to us, at least pay the money of patient”. They do say “It is in the bank”. But it’s not there. Patient questions us politely about the same’.

ASHAs are also expected to become active members of Self-Help Groups (SHGs) and take part in community participation structures such as Village Health and Nutrition Committees. However, the majority of respondents indicated lack of involvement in these two spaces of participation due to scarce time availability. Also, while all ASHAs were aware of the existence and rationale for the functioning of SHGs, the majority did not appear to understand why they should be involved. However, the few that are actively involved with SHGs value the opportunities they provide for marketing their services and amplifying their effectiveness, ‘I take my knowledge from here and give it there. They also give me feedback (about) operations for family planning. We have targets, they don’t have targets. We ask them to bring people’.

Motivation by feedback and answerability

Weekly HSC meetings bring ASHAs and other CHWs together to formally report progress on their work-plans and to receive feedback and refresher training. ‘New information is given, survey methods and results are discussed since they are important for the work to proceed. The remuneration for everyone is calculated and everything is analysed’. HSC meetings were partly designed as a space to satisfy the need for feedback and plan for future improvement. Notwithstanding, respondents only described receiving feedback focused on adherence to externally defined targets, ‘We get to learn more about vaccination in meeting, so we see that

not even a single child to be missed from the vaccination, so we take more care in that’.

During HSC meetings, the formal exercise of top-down answerability for adherence to performance targets takes the form of appraisal reviews, exhortations for increased productivity and, frequently, public reprimands. ‘So, in these meetings, those who work in a weak way are pressured to work better’. One of the most frequent causes for reprimands is ASHAs’ inability to reach institutional delivery targets. ‘There were few members whose (customers) delivered in private hospitals. So, we were questioned and put to task as to why it happened. Our Head then told us that it was due to the fact that ASHA members could not help them. That is why they went to a private hospital’.

Ultimately, reactions to the hierarchical, command-and-control approach to supervision appear to vary according to individual dispositions and preferences, ‘Those who work hard and who want their Sir to appreciate their work and get good image in the area, are those who feel happy, that they can learn what they have forgotten when it will be repeated at the meeting. But those who don’t find taste in that Sir would say. . .sir always calls for meeting and keeps repeating the same thing like ‘Do survey’ or ‘Do due list’ and all. And I do not like these’.

Discussion

We studied motivational mechanisms that affect ASHAs work behaviours, job performance, organizational commitment and job (dis)satisfaction. Our findings contribute to the scarce but growing literature that addresses causal linkages between health systems context, CHW programme’ implementation and PHC system performance (Willis-Shattuck *et al.*, 2008; Kane *et al.*, 2016a; Ballard and Montgomery, 2017; Jigssa *et al.*, 2018; Scott *et al.*, 2018). The findings also expand research on CHWs performance that is informed by theories of work motivation (Druetz *et al.*, 2015; Vareilles *et al.*, 2015a; Gergen *et al.*, 2018a; Lohmann *et al.*, 2018a, 2018b).

Study findings reinforced previous evidence about the role of context on CHW performance (Kane *et al.*, 2010; Kok *et al.*, 2015b, 2017; Kane *et al.*, 2016b). Failures in ASHA programme implementation, particularly delayed incentive payments, increased workload, lack of support from the health system, and managerial and supervisory practices have fuelled job dissatisfaction among ASHAs in our sample. Findings indicate that, other than the highly satisfying sense of community recognition and social status, extrinsic rewards such as financial incentives are not only achieving their intended behavioural aims, but also failures in their deployment have led to perceptions of unfairness.

At the same time, various factors in ASHAs’ context have contributed to the generation of intrinsic motivation. For instance, being an ASHA allows these women to work outside their homes leading to a sense of personal empowerment and the satisfaction of a sense of individual autonomy. ASHAs are intrinsically motivated by the acquisition and use of technical skills which contributes to their need for competence and self-efficacy; they are also satisfied by the sense of relatedness and connection towards their local community and their peers. They see themselves as competent, autonomous and socially connected individuals, psychologically attached to their communities, and identified with Bihar’s PHC system. This has led to a form of commitment to work that has been shown to improve job satisfaction and work performance in other settings (Christian *et al.*, 2011).

Our findings suggest that managerial challenges have contributed to ASHAs’ job dissatisfaction and, through this pathway, may

proximally affect their work performance and, distally, could reduce the programme’s intended health and equity effects. These challenges appear to reflect issues of relations and power that may be deeply rooted in collective norms, practices and routines that are perpetuated by ongoing managerial practices. One of the more salient of these was exemplified by the thwarting effect that public blaming and shaming and reprimands have upon ASHAs’ motivation and job (dis)satisfaction. From a practical standpoint, these findings suggest the need to develop managerial competences among CHW supervisors, an aspect that has been recognized in recent literature (Bradley *et al.*, 2015). Options may include, among others, the introduction of human resource and performance management systems that effectively leverage ASHA’s intrinsic motivation while, simultaneously, incentivise managerial behaviours through which ‘those with power in organizations share power, information, resources, and rewards with those lacking them’ (Fernandez and Moldogaziev, 2013, 2015).

Given the cross-sectional nature of our study, we cannot characterize the dynamic interactions between context, motivational mechanisms and programme outcomes through time. However, we posit that, as long as no alternative job opportunities are available, ASHAs with strong intrinsic motivation may have no option but to remain at work, as this paper’s title suggests. However, given increased personal empowerment, ASHAs have the necessary autonomy to determine the level of effort they dedicate to work and may recourse, among other actions, to continue working to maintain their social status and, also, reducing their level of effort or leaving the workforce altogether.

Additional studies need to consider the inclusion of more diverse samples of ASHAs in different contexts. This could help to identify additional mechanisms of motivation and outcomes beyond those described here. Proximal outcomes could include turnover intentions, absenteeism, stress and work morale and, distally, health and equity outcomes. Research is also needed to better understand how ASHAs’ performative behaviours are triggered, sustained and/or lost at the individual, organizational and PHC system levels, and why. Such evidence can provide insights for re-designing Bihar’s ASHA programme and may be relevant for other similar contexts in India and elsewhere.

Research is also required to better characterize the dynamics of motivation and work behaviours, with particular consideration given to the effects that factors such as closeness to community, caste and gender relations, and collective norms have on motivation, commitment, job (dis)satisfaction and performance. Along these same lines, although we found that beneficiaries had a positive perception of ASHAs’ contributions and appreciation for their work, studies need to explore the extent to which socio-cultural factors can affect ASHAs’ credibility and trustworthiness through time. The latter could increase ASHAs’ social capital thus reinforcing their emergent identity as healthcare workers and enhance community participation. Longitudinal, mixed-methods studies could be relevant to better understand patterns of performance change and improvement (and/or failure) through time; also, to study the recursive links between ASHA motivation and distal, population-level health and equity effects.

Two linked programme redesign challenges need to be addressed in the short run. Firstly, ASHAs work needs to be crafted in ways that simultaneously consider their own rights and aspirations and their particular mix of intrinsic and extrinsic motivation. On the other, issues of ASHA compensation need to be addressed with a view towards equity and efficiency. Although ASHAs are theoretically defined as volunteers, they are managed as if they were formal

employees. For instance, their payment is contingent on achieving specific targets and productivity levels; they report to supervisors; and their performance is appraised by managers who have the authority to withhold payments when contingencies are not met. Given such requirements, it is no surprise that small and unpredictable payments have become major sources of job dissatisfaction for ASHAs, particularly in view of growing workload. Consideration should be given to research that explores the extent to which Bihar's overall approach to ASHA programme implementation is achieving its intended aims, and consider the unintended side-effects that might be happening such as gaming, shirking and the undermining of non-incentivized activities.

This article has several strengths. The use of a theory-driven approach to identify causal mechanisms helped us characterize the role that context plays on Bihar's ASHA programme and also allowed us to link findings to previous studies. Such an approach increases policy relevance from the findings and contributes to knowledge by providing explanatory hypotheses for future empirical testing. Furthermore, we have identified causal linkages among context, motivation and work performance that are scarcely addressed in the CHW literature in LMICs. Study limitations include the possibility of social desirability bias among respondents which, if present, may have limited the disclosure of negative aspects in ASHA's experiences—an aspect of relevance given the nature of India's power hierarchies. One way to address this in future studies is to utilize ethnographic methods and non-participant observation over longer periods of time and with more varied samples of respondents.

Conclusions

We identified several types of intrinsic and extrinsic motivational mechanisms of ASHAs' work performance. India's NHM has created a window of opportunity for empowering a very large number of female CHWs. ASHAs have become deeply engaged in community service that helps realize their intrinsic psychological needs in spite of the dissatisfaction they feel with real and perceived failures in the implementation of Bihar's ASHA Programme. Our findings are relevant for future policy and programme design and evaluation. The effectiveness of Bihar's ASHA programme could be enhanced by the introduction of adjustments that build upon the identified intrinsic motivators. An overhaul of ASHA workers' incentives and support systems is also needed to ensure that extrinsic motivation is sustained.

Supplementary data

Supplementary data are available at *Health Policy and Planning* online.

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