Case study on the impact of Private Public Partnerships through Publicly-funded insurance schemes on women in India, with special reference to Chhattisgarh State

**SULAKSHANA NANDI** July, 2020

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## Case study on the impact of Private Public Partnerships through Publicly-funded health insurance schemes on women in India, with special reference to Chhattisgarh state

## By Sulakshana Nandi

### 1. Introduction

In India, profound inequities exist with respect to health service utilisation and access to health care, related to socio economic and political status, geography, and gender differences, amongst others (Balarajan, Selvaraj and Subramanian, 2011). This is reflected in higher mortality rates, a larger burden of disease, along with high levels of malnutrition among socio-economically vulnerable groups such as Scheduled Tribes (STs), Scheduled Castes (SCs)<sup>1</sup>, rural populations, and urban poor. These groups have historically been subjected to a process of impoverishment and marginalisation, through exploitation by the dominant social and economic groups and lack of appropriate and responsive development processes (Drèze and Sen, 2013). Within this context of inequity, different groups of women face the brunt of multiple disadvantages and vulnerabilities that intersect with each other and that too at every stage of their lives. While India 'progresses' on its development paradigm in a liberalized economy, women have been the ones most affected by the increasing violence, dispossession and resource capture, environmental degradation, migration, informalisation of labour<sup>2</sup> and dominance of the conservative right-wing. Age-old discriminatory practices such as sex-selective abortions, child marriage, dowry, witch hunting, honour killings continue. All this combined with inadequate increase in social welfare, decreases in public provisioning of public services and increasing privatisation has made women who belong to lower socio-economic categories, caste and tribal groups, more vulnerable. Women's organisations and feminist organisations have been resisting and campaigning against the processes that undermine women's status and agency. Struggles have been led by women belonging to ST and SC communities against capture of resources, displacement and

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<sup>&</sup>lt;sup>1</sup> Recognising the discriminatory nature of the 'caste system' in India, the Constitution of India classified disadvantaged social groups and communities into 'Scheduled Castes' (SC) and 'Scheduled Tribes' (ST) and made special provisions in order to undo socio-economic and political injustices towards them.

<sup>&</sup>lt;sup>2</sup> https://wcd.nic.in/sites/default/files/Executive%20Summary HLC 0.pdf

corporatization and also against health privatisation. Recent mobilisations have been led by young women and wider solidarities built with other social movements.

Chhattisgarh is the tenth largest state in India, with an area of 135,191 km<sup>2</sup>, and the seventeenth most populous state in, with a population of just over 25.5 million (RGI & Census Commissioner, 2011). It is located in the south-eastern part of central India and became a separate state in 2000 when it split from Madhya Pradesh (Figure 1). It is divided into 27 districts.

Figure 1: Location of Chhattisgarh State in India

(Source: http://mapsopensource.com/chhattisgarh-location-map.html)

Around 41 per cent of Chhattisgarh's geographical area comes under forests (Forest Survey of India, 2017). The population is mostly rural with only 22 per cent of the households living in urban areas (RGI & Census Commissioner, 2011). Nearly 86 per cent of the households in the State have been enumerated as being poor. Out of the total population, 31% are STs and 13% are SCs (RGI & Census Commissioner, 2011).

In India and in Chhattisgarh the gender-based differences are stark with regards to health and nutrition indicators. The overall healthcare scenario for tribal communities has been that of poor access to public health programmes and health services, that has serious implications for women from these communities, reflected in their health and nutrition indicators, including in Chhattisgarh. Although Chhattisgarh has seen a significant improvement in health indicators since 2000, it is still one of the low performing states in India, with mortality rates higher than the national averages.

While the previous disease patterns (malaria, TB, leprosy) remain, newer conditions, such as non-communicable diseases, mental health issues are now being identified. In India there has been some improvement in women's access to healthcare after the initiation of the National Rural Health Mission in 2005 (NHSRC, 2012), however gaps remain with regards to quality of care and coverage of all kinds of health services and not only ones related to maternal health. Recent interventions in the form of Health and Wellness Centers, aimed at providing a

comprehensive set of services at the primary level, could improve the access of women to a range of services. However, this programme remains under-resourced and its implementation inadequate. The largest 'flagship' programme of the national government in the recent years has been the publicly funded health insurance (PFHI) scheme Pradhan Mantri Jan Arogya Yojana (PMJAY), an expanded version of previous PFHI schemes. The PMJAY is considered to be the largest PPPs initiated by the Indian Government (Mukhopadhyay and Sinha, 2018).

## 2. How PMJAY became the largest Private Public Partnerships (PPP) in India

The structural adjustment programmes (SAPs) of the 1990s led to the retreat of government from the social sector and damaged India's public health system (Rao, 2009). When a new coalition government, the United Progressive Alliance (UPA) that included left parties, came into power in 2004, they were compelled to act on reversing the losses. The following years saw the passing and implementation of important legislations and public programmes, related to universal healthcare, employment guarantee, right to education, public accountability through right to information and so on. The National Rural Health Mission (NRHM) was launched in 2005 provided much needed finances and an impetus to strengthen the government health system (NHSRC, 2012). The National Urban Health Mission was introduced in 2013, and subsequently both the rural and urban programmes were integrated under a common National Health Mission (NHM). Though the NRHM kept the door open for PPPs, there was significant focus on improving the public health system. This resulted in expansion of the public health infrastructure, primary level healthcare services and hospital care especially for maternal health, increase in human resources for health, initiation of community processes and participation for health governance and accountability and (NHSRC, 2012). While there were implementation gaps and quality issues, improvements in health and health service indicators were visible (Mukhopadhyay and Sinha, 2018). In 2014 the right-wing led National Democratic Alliance (NDA) came into power at the national level and dealt a blow to these efforts. Funding for health and other social programmes was reduced. So much so that in 2015-16 the health spending as a proportion of GDP was lower than what it was in the early 1990s at the time of the SAPs (Mukhopadhyay and Sinha, 2018). Since then the National Health Mission has faced a steady decline in budgetary allocations in real terms.

More or less parallel to the inception of NRHM, many states began introducing publicly-funded health insurance (PFHI) schemes, with the aim to protect the poor from catastrophic health expenditure<sup>3</sup> (PHFI, 2011). In 1999 the Indian government opened up insurance to private sector as part of the liberalization process, which also saw the influx and subsequent growth of the private insurance industry (PHFI, 2011). The Rashtriya Swasthya Bima Yojana (RSBY) or National Health Insurance Scheme was launched by the Ministry of Labour in 2007 as the first national-level scheme for the unorganised sector, targeting insurance cover for 'Below Poverty Line' (BPL) households requiring hospital care. It was also the first time the government planned to draw extensively from the private health sector providers. Subsequently many states expanded the coverage and scope of RSBY. Chhattisgarh was one of the first states to implement RSBY (meant for the Below-Poverty Line families) in 2009 and it expanded the scheme to all families (including the non-poor) living in the state through the Mukhyamantri Swasthya Bima Yojana (MSBY) in 2012.

The national NDA government expanded the RSBY in 2018 in the form of Pradhan Mantri Jan Arogya Yojana (PMJAY) under the 'Ayushman Bharat Yojana' reforms, increasing population coverage and insurance coverage per household, from the previous INR 30,000 (US\$ 440) to INR 500,000 (US\$ 7296) annually (Chatterjee, 2018). As with previous PFHI schemes, families do not have to pay for enrolling and the government pays the annual premium for the scheme.

PFHI schemes such as PMJAY are governed by contractual agreements between the public and the private sector, located within a regulatory framework, involving commercial interests and are therefore considered to be PPPs (Khetrapal, Acharya and Mills, 2019). Private and public hospitals are empanelled through a contract, to provide services under the scheme as per fixed rates. PMJAY has listed over 1300 procedures/services/treatments for which rates have been fixed. The government makes payment based on these rates, for the claims submitted by empanelled private and public hospitals. The hospitals are not allowed to take any additional money from the patients who have used the PFHI scheme.

Earlier PFHI schemes such as RSBY were considered as just one of the many health programmes of the government, with NHM receiving more prominence. PMJAY on the other

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<sup>&</sup>lt;sup>3</sup> Catastrophic health expenditure is an economic shock to families or individuals due to healthcare expenditure. It occurs when a family or person has to incur expenses on healthcare that are above their capacity to pay.

hand has been promoted as the main and only health programme of the NDA government and all other health initiatives have been relegated to a lesser position. The implications of this for the public health system, government health services and women are discussed later in this report. PMJAY was advertised by government as the "world's largest government-funded healthcare programme", disregarding not only larger universal schemes of many countries, but also of the NHM. The political clout behind PMJAY is evident in the way it got closely associated with the Prime Minister, with media referring to it as "Modicare". The government modified the institutional and governance arrangements of PMJAY from earlier PFHI schemes, to include the for-profit private sector and their organisations and bypass the Ministry of Health. This move is located within the larger political economy context of promotion of healthcare as a commodity and not a right, and of right-wing neoliberalism of the NDA Government. PMJAY has also been promoted as a strategy to "help India progressively achieve Universal Health Coverage (UHC) and Sustainable Development Goals (SDG)".

This report assesses the impact of PFHI schemes especially PMJAY, as PPPs, for women in India, with special reference to Chhattisgarh state.

## 3. Methodology

## Conceptual framework

This report integrates DAWN's conceptual framework on PPPs (Enríquez, 2019) and the framework developed by the author for assessing pathways of impact on equity of access in publicly-funded health insurance programmes for UHC. Both are integrated to to explore the consequences of PFHI schemes as PPPs for women in India (Nandi and Schneider, 2020).

DAWN's framework on PPPs takes into account the context, the main actors, regulatory and legal frameworks, characteristics of the PPP, gender and human rights' analysis of implementation and functioning of the PPP case, transparency and accountability, governance and resistance. The framework for assessing the pathways of inequity and access in PFHI schemes is used to analyse the gender and human rights impact of the scheme. This is done by linking the design and objectives of the schemes, their implementation, and impact on service provision, utilisation, health systems functions, the services being provided, access (affordability,

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<sup>&</sup>lt;sup>4</sup> https://pmjay.gov.in/benefits-of-pmjay

availability and acceptability) and health outcomes. Public and private sectors are studied separately. Equity concerns, in this case, of gender, are explored explicitly in the elements of the framework and all analysis embedded within the larger socio-economic and political context.

## Data collection and analysis

This report draws on a range of data sources in applying the above conceptual framework to an analysis of PFHI schemes as PPPs in India, with special reference to Chhattisgarh state. Data has been collected through review of secondary data sources and participant observation by the author as an activist of Jan Swasthya Abhiyan (People's Health Movement India). The report draws heavily from the author's PhD thesis (Nandi, 2019). The sources of secondary data include publications on PFHI schemes in India and Chhattisgarh, including research by the author and collaborators, programme evaluation reports, media reports, websites, and campaign and advocacy documents. The data is used to analyse the impact of PFHI schemes, as a PPP, on 4. Context and emergence of PFHI schemes in India

India's mixed health system consists of a complex network of public healthcare facilities and programmes, aiming to provide universal preventive and curative health services at low or no cost. There is a large formal for-profit private health sector which is heterogeneous, concentrated in urban centres and providing healthcare on a fee-for-service basis (Mackintosh et al., 2016). Financial burden related to healthcare is on the rise. The proportion of households reporting catastrophic expenditure on health rose from 15 per cent in 2004 to 18 per cent in 2014 (NHSRC, no date). Currently out-of-pocket (OOP) payments by households constitute 60.6 per cent of total health expenditure (NHSRC, 2018).

Studies on the genesis of RSBY reveal some of its key motivations. The RSBY was initially hosted by the Labour Ministry, rather than the Health Minister, as the main considerations came from labour issues related to India's economic growth in the early 2000s. The PFHI scheme was considered an 'investment' in worker productivity especially in the informal sector, and India's future economic growth (Virk and Atun, 2015). This was aided by liberalised policies and the growth and domination of private healthcare markets, changes in regulation of private health insurance, technological advancements, and experiences of the previous state insurance schemes

(Shroff, Roberts and Reich, 2015; Virk and Atun, 2015). Other factors were a new government that wanted to be seen providing social protection to the large unorganized sector commensurate with India's high growth rate, and in the context of globalization and structural adjustments programmes (Shroff, Roberts and Reich, 2015; Virk and Atun, 2015). What has also emerged is that those who designed RSBY were very critical and skeptical of public provision of health services, and had great faith in the "effectiveness of market-based healthcare provision" through efficiency, competition, and individual choice (Virk and Atun, 2015, p. 815). These considerations were rooted in neoliberal thinking and the dominant discourse was influenced by considerations of human capital development, efficiency and productivity rather than 'needs' or 'rights' (Virk and Atun, 2015). Moreover, the pitching point for the PFHI schemes was as a 'business model' that intended to be profitable for all parties involved by design, prioritising profit-making over people's health. This framing has had implications for women's access and their interactions with the service providers, which will be discussed in later sections.

The role of corporate entities in the evolution of the PFHI schemes was evident from the beginning. The conceptualization and introduction of the Yeshasvini scheme in Karnataka in 2002 is attributed to the founder of a corporate hospital chain, then known for telemedicine initiatives and low-cost cardiac procedures (Venkat Raman and Björkman, 2008; Maurya and Mintrom, 2019).

As the global discourse on Universal Health Coverage started growing, it further influenced the push for PFHI schemes in India (Shroff, Roberts and Reich, 2015; Virk and Atun, 2015). The industry associations too started articulating their demands and recommendations through this discourse, which is evident especially in the context of the PMJAY (CII & PWC, 2018; KPMG & Assocham, 2019). The PMJAY was introduced with an explicit aim to benefit India's health sector ("the largest and fasting growing sectors")<sup>5</sup>, something that was not so explicitly articulated previously. The stated benefits of PMJAY for the health system includes its role to act "as a steward, align the growth of private sector with public health goals" and "enable creation of new health infrastructure in rural, remote and under-served areas"<sup>4</sup>. As we will see subsequently,

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this has opened up other avenues for PPPs for government. PMJAY is also supposed to help India progress on the SDGs.

## 5. Main actors promoting and implementing PFHI schemes

The NITI Aayog, a government think tank, is a significant actor in PMJAY and PPPs in India. They drive the policy-making on PPPs and are involved in developing agreements, reviewing PPP projects, suggesting required institutional, regulatory and procedural reforms, and developing PPP initiatives for the government. They have been instrumental in conceptualizing PMJAY and have also been responsible for developing the new organizational and governance structure for its implementation (NITI Aayog, 2020).

The last two years have seen a plethora of PPP initiatives and policy decisions emerging out from the NITI Aayog that are seen to be 'complementary' to PMJAY. This includes a plan to provide land and viability gap funding for the private sector to set up and operate hospitals in Tier 2 and Tier 3 cities<sup>6</sup>, and a proposal for privatizing District Hospitals. The NITI Aayog uses PMJAY for recommending the PPP for the Tier 2 and 3 cities. The first proposal uses PMJAY as a rationale and proposes that it will ease the usual regulatory and statutory compliances building private hospitals that would be required due to PMJAY coverage (NITI Aayog, 2020). The second one proposes converting public hospitals into profit-making enterprises, which would be disastrous for women, STs, SCs and rural populations if carried out<sup>7</sup>.

There has been visible participation from the private health sector (hospital owners, doctors associations), international agencies (World Bank, GIZ), UN agencies (WHO, ILO) and philanthropic foundations (Bill & Melinda Gates Foundation or BMGF) and think tanks funded by them in promoting, implementing and developing PFHI schemes in India. Their participation has been in various aspects of design, implementation, financing, and in providing various kinds of services, from direct healthcare provisioning (private health sector) to involvement in information technology support and research (international research agencies). Organisations and companies working on digital health and software companies are another group that has an

<sup>&</sup>lt;sup>6</sup> Tier 1 cities are the metropolitan cities and Tier 2 and Tier 3 cities follow them in terms of lower population, levels of urban development, standards of living and other indicators.

<sup>&</sup>lt;sup>7</sup> https://en.gaonconnection.com/central-governments-move-to-privatise-district-hospitals-spells-disaster-for-indias-poor

interest in this<sup>8</sup>. The engagement of national and state governments with the for-profit private health sector through PFHI schemes is of a scale that is unprecedented. The insurance companies and Third Party Administrators (TPAs) too have a vested interest in the continuation of the PFHI scheme.

The involvement of the for-profit private sector in its numerous forms and roles seems to have increased manifold under the PMJAY. The National Health Authority (NHA) that is the implementing agency for PMJAY lists in its annual report, the partners for PMJAY. They include international and multilateral organizations that were also involved in RSBY such as Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and World Bank, and new ones such as Asian Development Bank (ADB) and BMGF (NHA, 2019). The CEO of the NHA has also previously worked in ADB and the World Bank.

Private hospitals, especially corporate ones, and doctors' associations such as the Indian Medical Association (IMA) have always acted as pressure groups, demanding that government should increase rates for procedures under PFHI schemes, provide more subsidies and reduce regulation. They have threatened to go on strike and have suspended health services under the PFHI schemes in order to exert pressure on the government (Mamidi and Pulla, 2013; Nundy *et al.*, 2013). Under PMJAY the involvement of the corporate health sector in the scheme's functioning has been institutionalised with their organisations, such as NATHEALTH, being recognized as formal partners of the National Health Authority. Consultancy agencies such as PWC<sup>9</sup> also add to the demand to making the PFHI schemes more profitable for the private sector.

There is no formal role for the community, women's organisations or any other civil society to participate in the functioning of the PFHI scheme, nor are they part of any formal regulatory framework.

## 6. Regulatory and legal framework of PFHI schemes

India's for-profit private health sector is largely unregulated and is known for unethical practices and for extorting money from patients (Gadre and Shukla, 2016; Mackintosh *et al.*, 2016;

<sup>&</sup>lt;sup>8</sup> https://theprint.in/opinion/ayushman-bharat-can-be-a-success-if-modi-govt-incentivises-digital-data-for-private-players/353827/

<sup>&</sup>lt;sup>9</sup> https://economictimes.indiatimes.com/news/politics-and-nation/panels-to-review-ayushman-bharat-price-caps/articleshow/69867242.cms

Sengupta *et al.*, 2017). This is more the case with corporate hospitals. The national Clinical Establishments Act was passed in 2010 through intense negotiations with the private sector and fails to include the critical aspects of patient's rights, regulation or even display of rates<sup>10</sup>. Many consider the CEA as a strategy promoted by corporate hospitals to close down smaller hospitals and nursing homes through mandating high and stringent standards. Chhattisgarh's own Act incorporates patients' rights, however, it is not being implemented adequately (Nandi, Joshi and Dubey, 2016). The RSBY and subsequently the PMJAY was introduced into this context of a largely unregulated and powerful for- profit private health sector and therefore this affects the regulation of the schemes. A distinction needs to be made between the for-profit and non-profit private sectors, as the truly not-for-profit private hospitals have been seen to operate with public interest in mind, even under PFHI schemes.

The government has in different periods de-empanelled hospitals due to various lapses or wrong doings under PFHI schemes. However, as discussed later in cases of hysterectomy, often the doctor's lobby (from public and private sectors) comes together against any such action by government. There have been instances wherein the governing body (trust) set up to implement and monitor the PFHI scheme consists of corporate hospital owners who themselves are the recipients of a large proportion of the claims.

At the national level, an autonomous body, the National Health Authority (NHA), has been formed to implement PMJAY, thereby bypassing the role of the Health Ministry in this PPP, and thus modifying implementation and regulation procedures. In fact in August 2018, just prior to the implementation of PMJAY, the government attempted to outsource the functions of the NHA to a consultancy management agency and put out an advertisement<sup>11</sup>. However this move seems to have been quashed for the time being. In a context where the for-profit private sector already dominates and colludes with public sector administrators and health personnel, setting up an autonomous body to bypass the Health Ministry does not bode well for regulation and oversight. The implication of this, especially for women is visible.

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 $<sup>^{10}\,</sup>https://www.newindian express.com/the sunday standard/2020/jan/26/patients-fleeced-as-governments-dawdle-2094601.html$ 

<sup>11</sup> https://pmjay.gov.in/node/169

At the state level in Chhattisgarh, since the time of RSBY implementation, a State Nodal Agency has been created under the Department of Health and Family Welfare (DoHFW) for implementation and monitoring of the PFHI schemes. Governance and decision-making functions regarding PFHI schemes lie with various officials of the department. However, many of the officials who are responsible for fixing the rates and monitoring the hospitals, are themselves involved in private practice and own private hospitals. This has created a clear possibility for conflict of interest, more so in a situation in which the private doctors themselves form a pressure group for negotiating details of the PFHI schemes (Garg, 2019).

## 7. Design of PFHI schemes in India and Chhattisgarh and implementation structures

The objectives of RSBY were to improve access to quality health care, provide financial protection from hospitalization expenses, provide beneficiaries the power to choose from a national network of providers and provide a scheme which the non-literate could use easily (Jain, 2014). While under PMJAY the stated objectives remain the same, there is a mention of "priority to girl child, women and senior citizens". Most PFHI schemes cover a limited number of procedures and treatment, consisting mostly of hospitalisation and a few out-patient services. While the coverage of hospitalization services under PFHI schemes and exclusion of out-patient services have been critiqued by some, the greater potential risk of fraud in out-patient care has also been highlighted (Nandi and Schneider, 2020).

There are two models of implementation of PFHI schemes in India. One kind is a trust, an autonomous organisation set up by the state government to empanel hospitals and pay the claims. The second model involves hiring an insurance company and paying them premiums to handle the payments. The rates on the basis of which payment is made, is a mix of per case, per procedure and per day rates. The guidelines and conditions under the scheme are laid down through legal contracts between the state, the insurance company and the participating hospitals. The hospitals are required to provide 'cashless' treatment, that is without taking any money from the patient, and claim the payment from the government or insurance company on the basis of the pre-determined rates.

Chhattisgarh has been implementing PFHI schemes through the insurance company all these years and has only from the beginning of this year (2020), started a system of direct payment of claims, without the insurance company.

## 8. Transparency and accountability measures

The oversight of the scheme at the state level is with the State Nodal Agency (SNA), under the Department of Health and Family Welfare and at the national level it is with the National Health Authority.

The use of biometric smart cards under RSBY was seen as a tool for monitoring transactions and identifying fraud. It was to facilitate ease of access and transparency, and detect fraud. However experience shows that it failed to protect the patients from OOP payments. Hospitals kept the smart card as a bond, until their claim got settled from the insurance company. This means that if the family needed to use it again during that period, they could not do so (Nandi and Schneider, 2019). The use of biometric smart cards has been discontinued now.

One of the methods of reporting grievances is through the helpline. An analysis of the complaints of private sector hospitals recorded in the helpline in Chhattisgarh shows that a very miniscule number of complaints are made on the helpline. One reason for this is fear of retribution. Families of patients worry that if they complain the hospital and doctors would not treat the patient properly or intentionally do harm (Nandi and Schneider, 2019). They also worry that in future they would not be able to come to the hospital for treatment again.

Despite the emphasis on and showcasing of IT systems, data (even anonymised) is not available for public scrutiny. In Chhattisgarh the author has asked for PFHI scheme data and has received it. But it is not in the public domain. The problem of transparency has been even starker under the PMJAY. In the name of transparency, the main data available to public is through tweets containing updates on the number of cases under PMJAY. There are state factsheets uploaded on the NHA website, however, they are not updated monthly and provide data for only a few overall indicators. On the other hand, scheme data is made available to select researchers (World Bank and GIZ) and sometimes to certain journalists. There are publications and studies using PMJAY data only by this very select group that has been involved in developing the scheme. Therefore, they have dominance over the nature of the evidence that is being created. A similar situation

was seen during the initial years of RSBY (2011–2013) when a large number of studies or reports were undertaken by agencies who had been involved in introducing PFHI schemes in India, or by people associated with them, of which the World Bank and GIZ were predominant. The research on PMJAY published by NHA is often authored by people employed by these organisations, especially World Bank. However, in most cases the authors' affiliation to the World Bank is not stated. Moreover, most of these reports have a disclaimer that "The PM-JAY data used in the analysis should not be utilized/quoted without prior permission of NHA" which further restricts its use in public discourse.

Patients and their family also face the problem of not having easy access to their own data, which is available only with the 'computer person' at a far off health centre that has a computer. Furthermore, the government has proposed to create a digital health registry and also to be able to sell medical data to commercial entities. The IT-dependent PMJAY thus makes patients vulnerable to problems of data privacy and ownership.

An overwhelming concern in PFHI schemes has been the increasing collusion between the forprofit private hospitals and public administrators that undermine any attempts at accountability. Dual practice by government doctors has always existed, however, with PFHI schemes, it has exacerbated as now their monetary incentive (ability to file insurance claims, take illegal payments) to refer to their or their acquaintances' private hospitals, has increased.

Under the PFHI schemes no role has been awarded to civil society groups, including to women's organisations or patient's rights groups. However, health activists, health organisations, including women's groups have been monitoring the scheme and bringing up critical issues about the scheme. Jan Swasthya Abhiyan (JSA) has been bringing to the fore the problems with PFHI schemes, especially in the context of health care for vulnerable groups. Community Health Workers (CHWs) are involved in documenting cases of denial of health care or violation of health right and illegal OOP payments and taking action on them as part of their work on accountability of health services.

## 9. Implications of this PPP for women's access to health services and financial protection

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<sup>&</sup>lt;sup>12</sup> Considering that these selective reports are the only source of PMJAY data available in the public domain, and on the principle of public ownership of data sourced from public programmes, this paper uses and quotes these reports without any such 'permissions'. The reports are available here https://pmjay.gov.in/resources/publication

The following section presents and discusses the implications of PFHI schemes for women's access to health services and financial protection. It discusses the evidence on PFHI schemes over the last decade and half, and both at the national level and at the state level.

### 9.1. Exclusions in enrolment

Studies on PFHI schemes from state and national-level studies have reported lower enrolment in remote rural areas, and poorer districts, among socio-economically vulnerable and indigenous (or tribal) communities, female-headed households and in the poor economic quintiles (Rao *et al.*, 2014; Ranjan *et al.*, 2018). Caste, including tribal group has emerged as significant determinants of inequity in enrolment and utilization, highlighting the interplay of the multiple disadvantages faced by these groups (Health Inc, 2014; Rao *et al.*, 2014; Thakur, 2015). This evidence points to the increased vulnerability of women belonging to these communities and areas. Moreover, with women already facing extreme hardships and barriers (within and outside their families) in accessing healthcare, having to enroll in the PFHI scheme to get the requisite benefit has become an additional barrier to accessing health services (Ramprakash and Lingam, 2018).

Most of the PFHI schemes are targeted for the poor identified using government survey data. However, multiple problems and exclusion errors have emerged in such surveys. This is posed a problem for many poor people in proving their eligibility for the PFHI schemes (Sen and Gupta, 2017). Chhattisgarh has had a universal PFHI scheme design since 2013 and therefore it has always had one of the highest enrolment rates in the country. Currently around 90 per cent of families and close to 75 per cent of individuals are now covered by PFI schemes (MSBY and PMJAY). Studies that have analysed aggregate population data show equitable enrolment across districts and socio-economic categories (Nandi et al, 2017; 2018). However, smaller primary studies among the most vulnerable groups, such as Particularly Vulnerable Tribal Group (PVTGs) and the urban poor have found much lower enrolment rates (PHRN, 2017; SHRC CG, PHRN and WHO India, 2020). For instance, a woman who belonged to a family of wastecollectors in Raipur city did not have any identity card and therefore wasn't enrolled in PMJAY. When she fell ill her family admitted her to a private hospital using her aunt's name, in order to avail her aunt's PMJAY entitlement. They still incurred OOP expenditure and once their money finished, she was shifted to the government hospital where she passed away (SHRC CG, PHRN and WHO India, 2020).

The RSBY entitled five members of a family, selected by the 'head of the family', to be enrolled under one card and in the highly unequal society such as in India, which has huge intrahousehold disparities, this meant that the same disparities may reflect in selecting the family members who are to be enrolled (Ramprakash and Lingam, 2018). While studies and programme data have shown increasing and higher proportion of women's enrolment (GIZ, 2015; Nandi *et al.*, 2016), age disaggregated analysis has revealed age-specific differences in enrolment based on gender, specifically among adolescents and people over 45 years of age (Palacios, Robert; Das, Jishnu; Sun, 2011; Nandi *et al.*, 2016).

PMJAY removed the five-person limit however gender differences in enrolment are still visible in Chhattisgarh. A 2019 study in the state shows that the proportion of women enrolled in PFHI schemes is marginally less (66%) than the proportion of men enrolled (69%) (SHRC Chhattisgarh, 2020). More significantly, it showed that women had 9% less chance of enrolling in the PFHI scheme than men. Moreover, members of women headed households had a 13% less chance of being enrolled compared to those in men-headed households (SHRC Chhattisgarh, 2020). Similar findings regarding lower enrolment in women-headed households have been found in other states (Rao *et al.*, 2014).

## 9.2. Are women able to utilize PFHI schemes for hospitalization?

Women have a higher proportion and greater likelihood of hospitalisation than men in some states (Ramprakash and Lingam, 2018; Ranjan *et al.*, 2018). While hospitalization rates of women may be higher, the utility of the PFHI scheme for women who are hospitalized needs to be interrogated. Study in Chhattisgarh shows that even with an universal PFHI scheme, more than one-third of women who were hospitalised, were not enrolled (SHRC Chhattisgarh, 2020). Even when enrolled, women are often unable to utilize the scheme for treatment due to refusal by the hospital to use the scheme or discrepancies in the software information (Nandi *et al.*, 2016). Consider for example the case study below:

Case study, from complaint submitted by Ramabai's father-in-law to the Health Minister:

When Ramabai, belonging to a SC community in Sarguja district, had labour pains she went to the Primary Health Centre. She was told that she may have miscarried and was referred to the district. The family took her to a private hospital which did not accept their PFHI scheme card. Not having any choice, the family agreed to pay OOP and she was admitted in the Intensive Care Unit (ICU) after they deposited Rs. 20,000. The family had to pay up Rs. 20,000 daily plus buy all medicines. The family tried desperately to arrange for more money. Five days had passed and they were also not being allowed to meet her. An acquaintance who works at the hospital told them that he had seen her body wrapped up and kept on the floor somewhere. The family was shocked and forced themselves into the ICU where they saw her body. She had died some time during the period. The hospital forced them to deposit Rs. 100,000 before releasing her body. The family had incurred around Rs. 350,000 by then. They arranged for the money by mortgaging the land that the whole family (consisting of four brothers and their families) owned.

## 9.3. What are women getting treated for under the PFHI scheme?

Data shows that utilisation of PFHI schemes is concentrated on a small set of services. The for-profit private sector provides narrow and selective services, engaging in 'cherry picking' of the more profitable packages and often convert out-patient care to inpatient (Dasgupta *et al.*, 2013; Maurya and Ramesh, 2018). There is a pattern of unnecessary surgeries such as hysterectomies, under PFHI schemes that will be discussed in the next section.

A PMJAY report analyzing high and very-high value claims (claims > INR 30,000 or USD 400) covering specialities such as cardiology, radiation oncology, cardio surgery, orthopedics, and neurosurgery, finds that they are skewed against women. While of the total claims, 48% are of women, when it comes to the high value claims, women's proportion reduces to 38% (Dong *et al.*, 2019). However under oncology packages, women had a higher proportion of utilization (Kaur, Jain and Bhatnagar, 2019).

In Chhattisgarh the overall PMJAY claims proportions are similar for men and women and he most common claims are for dental and ophthalmology services (SNA, 2019). For women, deliveries (cesarean and normal) and conventional tubectomy are the other highly utilized packages. However, similar to the national data, men have higher utilisation of packages related to non-communicable diseases (such as haemodialysis) and high-end surgeries (SNA, 2019).

## 9.4. Availability of hospital care for women

Studies show that under the PFHI schemes, public hospitals cater to the more vulnerable groups, including women (Prinja *et al.*, 2013; Ranjan *et al.*, 2018). In Chhattisgarh the public sector caters more to women, tribal communities and the poor than the private sector, regardless of PFHI scheme enrolment (Nandi *et al.*, 2016; Nandi, Schneider and Dixit, 2017). Obstetric and child birth-related conditions are significantly more likely in the public sector than other conditions (Nandi, Schneider and Dixit, 2017). In West Bengal women have talked about having trust in the public hospital and being unsure of what they might be subjected to or how much they would be made to pay at a private hospital (Sen and Gupta, 2017). They felt that the public hospitals were more transparent and would respond to any queries, whereas the private hospital would not tell them till the end how much they will charge (Sen and Gupta, 2017).

Even in terms of geographical distribution of hospitals, public sector hospitals are distributed relatively equally, the distribution of the private hospitals is highly unequal and concentrated in only a few cities (non-tribal areas) (Nandi, Schneider and Garg, 2018). The inequitable distribution of private health facilities and utilization under PFHI schemes has been seen across states (CEHAT, 2016; Garg, 2018). Study of high value claims under PMJAY found that that the claims are inequitably distributed across the country, with a clear male-bias (Dong *et al.*, 2019).

## 9.5. Experience of women in utilising the PFHI scheme

PFHI schemes were supposed to ease access to quality healthcare, increase 'choice' and provide financial protection. However, we find that women who are finally able to utilize the PFHI scheme for hospitalization face a lot of problems in all these dimensions.

There is overwhelming evidence that when utilizing the PFHI schemes, (1) most women have had to make OOP payments; (2) many have had to face harassment and abuse due to the inability to pay the amount demanded, especially in for-profit private hospitals; and (3) a large number of women have been subjected to unnecessary procedures and treatments.

## (1) High OOP expenditure despite insurance coverage

Financial risk protection from catastrophic health expenditures is seen as the main objective of PFHI schemes. However studies show that PFHI schemes have not enabled free hospital care and patients, including women, continue to incur very high OOP expenditure and catastrophic health expenditure, mainly in the private sector (Dhanaraj, 2016; Gupta *et al.*, 2017; Karan, Yip and Mahal, 2017; Prinja *et al.*, 2017; Ranjan *et al.*, 2018). The incidence and quantum of OOP expenditure is many times higher in the private sector, and it is mainly due to the illegal payments demanded by private hospitals (Rent and Ghosh, 2015; Ranjan *et al.*, 2018; Garg, 2019).

In Chhattisgarh too, high OOP expenditure has been reported, especially in the for-profit private sector, since the beginning of the PFHI scheme (Nandi *et al.*, 2016; Nandi, Schneider and Dixit, 2017). After controlling for other factors, women are significantly more likely to incur OOP expenditure than men and also that the median OOP for women who were insured (Rs. 3080), was higher than that of insured men (Rs. 2500) (Nandi, Schneider and Dixit, 2017).

Under PMJAY the same pattern of OOP health expenditure by patients, especially in the private sector, continues despite the increase in insurance coverage amount (Garg, Bebarta and Tripathi, 2020). Women are still incurring very high OOP payments in the private sector, regardless of whether they are insured or not. For enrolled women, the OOP expenditure was Rs. 10,000 (USD 133) in the private sector and Rs. 400 (USD 5) in the public sector (SHRC Chhattisgarh, 2020). The National Health Authority also reports that nationally in 2018-19, 93% of the complaints under PMJAY were of money being asked from the patients by the hospitals (NHA, 2019).

In making the OOP payments families have to face huge financial hardships, paying out of savings, taking loans from family or friends, selling or mortgaging jewellery, land or other assets, with women having to bear a lot of the burden (Nandi *et al.*, 2016; Nandi and Schneider, 2019). As primary care givers, women also have to bear the brunt of health rights violations. The following instances were narrated at conventions on Right To Health organized by JSA Chhattisgarh:

"A participant from Pandariya, hailing from Gond tribe, broke down while sharing how a private hospital in Raipur refused to treat her husband under RSBY and made her pay Rs. 2.4 lakh. When her husband was declared dead after 10 days of hospitalisation, the hospital asked for an additional Rs. 23,000 to release his body. She could manage to give only Rs. 10,000. It is then that the hospital took her RSBY card and deducted the rest of Rs. 13,000 and released his body! She had taken the money on loan that she was now responsible for returning on her own. She was facing a lot of financial difficulties as neither did she have any land (it still belonged to her parents-in-law) and nor were any family members helping her" (JSA Chhattisgarh, 2014).

"One participant spoke of how a private hospital demanded extra money from the wife of a patient admitted under RSBY. She could not arrange so much money and under that pressure died by jumping from the hospital roof" (JSA Chhattisgarh, 2018).

Case study (From complaint submitted by the patient to the Health Minister): 45 year old man from Pahari Korwa community (PVTG) from Jashpur got injured in September 2018. He travelled 350 kms to Raipur city (state capital) for treatment. The family thought they would use insurance card, but the Raipur hospital refused to use it even after depositing it. The hospital kept asking for money, making a total bill of Rs. 200,000. The family mortgaged land for Rs. 30,000, and took loans. The patient's daughter-in-law was taking care of him at the private hospital. The hospital kept the patient and daughter-in-law hostage in the hospital. While he was given food, she had to buy her meals. She ate only once a day as that cost her Rs. 40, and stayed hungry the rest of the time.

# (2) Women facing harassment and abuse due to the inability to pay the amount demanded, especially in for-profit private hospitals

What has emerged from women's narratives of their experience of using PFHI scheme in the forprofit private sector, is that despite attempts to exercise their agency during hospitalisation, they and their families are rendered powerless when dealing with private hospitals demanding illegal payments (Nandi and Schneider, 2019). They face abuse and humiliation from the staff and doctors of the private hospital when unable to pay the illegal amounts demanded of them. The hospitals do not allow exit of the patients as per their choice and instead create such circumstances so that the patient's family would have no choice but to pay up and keep the patient at the hospital (Nandi and Schneider, 2019). The following quote from the author's PhD illustrates how the private sector would go to any length to extract payment, and not consider public interest even when PFHI scheme is used:

"Meena narrates: 'We told the doctor that we could not continue as we have run out of money and asked for discharge. The senior doctor said: 'if your [economic] condition was not ok then why did you bring the child here? You should have taken him to Mekahara [government tertiary hospital]...You shouldn't have come here. You should have let him die'"

## (3) Women subjected to unnecessary procedures and treatment

Since the introduction of the first state PFHI schemes, women have been extremely vulnerable to unnecessary procedures and treatment (Prasad and Raghavendra, 2012; Nundy *et al.*, 2013; Ramprakash and Lingam, 2018; Chatterjee, 2019). Unnecessary hysterectomies and a rise in caesarean section rates under these schemes have been documented in private hospitals in many states, including Chhattisgarh. While for-profit private hospitals had always been doing unnecessary procedures, the introduction of the PFHI schemes, in which now the government was paying for these procedures, seem to incentivize them towards doing more such procedures<sup>13</sup>.

## **Unnecessary hysterectomies**

The issue of unnecessary hysterectomies related to usage of publicly funded health insurance schemes in private hospitals has emerged in many states of India and remains a concern under PMJAY. National data also shows that women with no or low education and those from households having insurance coverage were more likely to get an hysterectomy (Prusty, Choithani and Dutt Gupta, 2018).

Under the Aarogyasri PFHI scheme in Andhra Pradesh<sup>14</sup>, a large number of women (below 30 years of age) of the Lambada tribal community who had sought treatment for conditions such as stomach pain, white discharge, etc. were subject to hysterectomies in private hospitals (Mamidi

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<sup>&</sup>lt;sup>13</sup> https://timesofindia.indiatimes.com/india/The-uterus-snatchers-of-Andhra/articleshow/6239344.cms

<sup>14</sup> http://www.carped.org/attachments/article/30/Greedydoctors.pdf

and Pulla, 2013). In Bihar around 16,000<sup>15</sup> hysterectomies were reported under RSBY in private hospitals during 2011 and that too among younger women<sup>16</sup>. The National Human Rights Commission ordered government to pay compensation of Rs. 250,000 (USD 3,300) to 702 women, but Bihar government reduced it to Rs. 50,000 (USD 700)<sup>17</sup>. In Chhattisgarh, cases of the unnecessary hysterectomies emerged under RSBY in 2012. Within 30 months, nearly 7000 cases were booked under the insurance scheme, mostly by for-profit private hospitals. Women aged between 30-35 years and belonging to lower socio-economic strata, were operated on without making them aware of any other medical treatment or the post-hysterectomy issues. Most of the women were (illegally) charged additional money for the operations. In both Bihar<sup>18</sup> and Chhattisgarh, the private doctors did not face any long-term punitive action. The women were never paid any compensation nor given any medical or other support. Two of the women narrated their experiences:

"Two women from Abhanpur Block, Sharda and Ramkali (names changed), spoke about the hysterectomy operations they were made to undergo. They narrated how the doctors in one of the private hospitals in Raipur prescribed that their uterus be removed in order to relieve stomach pain. Sharda was made to pay an extra Rs. 20,000 despite using the Rashtriya Swasthya Bima Yojna (RSBY) card, which offers cashless hospitalisation for up to Rs. 30,000. "We had to sell land to arrange for the money," she said. More than 20 women in her village had undergone hysterectomies" 19.

In Chhattisgarh, the government put restrictions on hysterectomies under RSBY in the private sector after the incidents emerged. However, these guidelines were abandoned when PMJAY got implemented in September 2018. This once again led to a surge of hysterectomies in the state. An analysis of the claims for hysterectomy under PMJAY for the period September 2018 to April 2019 shows that more than 75% of those claims came from only six states, with

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<sup>&</sup>lt;sup>15</sup> http://archive.indianexpress.com/news/16000--illegal--hysterectomies-done-in-bihar-for-insurance-benefit/993625/

<sup>&</sup>lt;sup>16</sup> https://www.hindustantimes.com/patna/in-bihar-hysterectomy-on-14-yr-olds/story-

QR2M49qazDcR14NE8RykDK.html

<sup>&</sup>lt;sup>17</sup> https://scroll.in/pulse/823650/bihar-government-slashes-compensation-for-702-women-who-have-lost-their-wombs

<sup>&</sup>lt;sup>18</sup> https://scroll.in/pulse/816202/bihar-women-who-lost-their-wombs-to-needless-surgeries-suffer-while-doctors-thrive

<sup>&</sup>lt;sup>19</sup> https://www.thehindu.com/opinion/op-ed/public-health-private-tragedy/article6633520.ece

Chhattisgarh having the most cases (Kaur S., Jain N., Desai, 2019). Age-wise data shows that 23% of the hysterectomies were done on women aged below 39. Nationally, 68.6% of all the hysterectomy cases were done in the private sector. In Chhattisgarh the proportion of hysterectomy claims in the private sector was 94.5% (Kaur S., Jain N., Desai, 2019).

### Cesarean section

High cesarean section rates in the private sector under PFHI scheme has been another issue of concern, particularly in Chhattisgarh. Claims data of one year (September 2018 to 2019) shows that under PMJAY 78% of the normal deliveries are done by the public sector while 93% of the c-section deliveries are done by the private sector (SNA, 2019). The proportion of C-section deliveries of the total deliveries done under PMJAY is 29%, which is very high as per WHO 2015 guidelines. In the private sector, the proportion of c-section deliveries is much higher at 63%. These figures point to serious problems in advising C-section to patients coming for delivery under PMJAY. The financial incentives of PFHI schemes have clearly led to the high proportion of c-section deliveries in the private sector. It is important to note that while the proportion of cesarean deliveries is extremely high under PMJAY, its spread is highly inequitable. In Chhattisgarh women of four districts having the main urban centres account for 31% of the c-sections, while women residing in seven districts of Bastar division, which are 'remote' districts with high tribal population, account for only seven percent of the C-section deliveries in the state (SNA, 2019).

## 9.6. Neglect of the public health system and primary health care and its implications for women

Since the time PFHI schemes were introduced, a larger proportion of the claims amount has been going to the private sector in most states. This is related to the issues of 'cherry-picking' and provision of selective services and illustrates provider capture. This trend continues under PMJAY too. In 2018-19, 62% of the total claim amount has gone to the private sector (NHA, 2019). This means that public funds that could have been used to improve the public sector that is providing more equitable health services and catering more to women, has instead gone to the private sector that is concentrated in urban centres, and engages in unethical practices.

While the private sector has managed to capture the market under PMJAY, the PMJAY itself has seen huge increases in its budget. The PMJAY was introduced as part of the 'Ayushman Bharat' initiative, which also includes a primary healthcare programme called the Health and Wellness Centres (HWCs). The HWCs model is a re-orientation of the existing sub-centres and primary health centers to respond to community's health needs through addition of human resources and expansion of their scope to cover non-communicable diseases (NCDs), mental health etc. in addition to their previous work on maternal and child health and communicable diseases. A study in Chhattisgarh shows that functional HWCs have greatly increased utilisation of public health services by women and the aged and enabled their access to free medicines for NCDs such as hypertension and diabetes (SHRC CG, PHRN and WHO India, 2020). Despite the obvious advantages of such a programme, the national government continues to neglect it, refusing to fund it adequately. The national government has prioritized PMJAY over HWCs and all other government health programmes including NHM, evidenced by the manifold increases in the PMJAY budget and the simultaneous underfunding of other programmes. This is clearly evident in the union budgets.

In the 2019-20 union budget nearly Rs. 40 billion (USD 530 million) was allocated for PMJAY, which was a whopping 167% from the previous year's budget (JSA, 2019). The HWCs were allocated only Rs. 16 billion (USD 213 million) and that too was to come from the National Health Mission's allocation that had not seen any real increase. This meant that if that amount had to be made available for HWCs, some other programmes would need to be cut under NHM (JSA, 2019). In the same budget allocations for Reproductive and Child Health (RCH) component under NHM were also drastically cut down. In fact the NHM's share in the union budget allocation on health showed a decline from 61% in 2014-15 to 49% in 2019-20.

This pattern has continued in the subsequent year. In the 2020-21 union budget PMJAY got a 100% increase in allocations, from Rs 32 billion (USD 426 million) to Rs 64 billion (USD 851 million) (JSA, 2020). On the other hand, budget outlays for NHM that includes component on HWCs, Reproductive and Child Health (RCH), disease control programmes, immunization and so on have been reduced in actual terms. In fact, the budget allocations for women-specific schemes across sectors (nutrition, health etc.) have been reduced. Moreover, there is a sharp reduction in capital outlays of 58% compared to the Actual Expenditure for 2018-19 in capital

outlays (meant for building hospitals, providing services and procuring equipment) which could further debilitate the public health system (JSA, 2020).

In Chhattisgarh the cost for the PFHI scheme has been increasing. Its budgetary outlay in the state budget increased by 40 times in eight years from Rs. 200 million (USD 2.7 million) in 2010-11 to Rs. 8 billion (USD 106 million) in 2018-19 (Garg, 2019). Even in Chhattisgarh this progressive increase for the PFHI scheme has been accompanied by simultaneous reductions or stagnation in allocations to other health programmes. For instance, though the National Health Mission budget has been increasing in real terms, it has a much lower rate of increase than the PFHI scheme budget (Nandi, 2019). Currently the PFHI scheme (PMJAY and MSBY) ranks second to the NHM in terms of being the largest item in state's health budget (Garg, 2019). Moreover, in Chhattisgarh the Tribal sub-plan (funds meant to benefit tribal communities) accounts for 39% of the PFHI scheme budget (Garg, 2019). However, these funds are mainly utilised in non-tribal areas and urban centres as private hospitals have captured the market under PMJAY in these areas, thus resulting in resource transfer from more vulnerable communities/areas to less vulnerable areas. Similar pattern has been seen under PFHI schemes in other states like Kerala, Odisha, Maharashtra, Gujrat, Andhra Pradesh (Garg, 2019).

## 9.7 PMJAY and the Covid-19 pandemic

India reported its first case of Covid-19 infection on 29th January 2020. Since then the figures have multiplied and as of 1st July, India has reported more than 560,000 infections and 17,000 plus deaths. As the number of cases increased, so did the requirement for hospitalisation. Considering the prominence and resources given to PMJAY and the for-profit private health sector by the government, it was expected that they would prove useful during the Covid-19 pandemic. However, both PMJAY and the for-profit private sector failed to provide the critical support to hospitalisations for Covid-19. Private sector hospitals either closed down operations or are refusing the admit patients who are Covid-19 positive. Wherever the private sector is treating such patients, they have been price gouging and making people pay huge hospital bills out of pocket<sup>20</sup>. Even though the government widely publicized that testing and treatment would be free for people under PMJAY, private hospitals are not using the packages. According to

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 $<sup>^{20}\,</sup>http://phmindia.org/2020/04/28/statement-on-the-role-of-the-private-health-sector-during-the-covid-19-pandemic/2020/04/28/statement-on-the-role-of-the-private-health-sector-during-the-covid-19-pandemic/2020/04/28/statement-on-the-role-of-the-private-health-sector-during-the-covid-19-pandemic/2020/04/28/statement-on-the-role-of-the-private-health-sector-during-the-covid-19-pandemic/2020/04/28/statement-on-the-role-of-the-private-health-sector-during-the-covid-19-pandemic/2020/04/28/statement-on-the-role-of-the-private-health-sector-during-the-covid-19-pandemic/2020/04/28/statement-on-the-role-of-the-private-health-sector-during-the-covid-19-pandemic/2020/04/28/statement-on-the-role-of-the-private-health-sector-during-the-covid-19-pandemic/2020/04/28/statement-on-the-role-of-the-private-health-sector-during-the-covid-19-pandemic/2020/04/28/statement-on-the-private-health-sector-during-the-covid-19-pandemic/2020/04/28/statement-on-the-private-health-sector-during-the-covid-19-pandemic/2020/04/28/statement-on-the-private-health-sector-during-the-covid-19-pandemic/2020/04/28/statement-on-the-private-health-sector-during-the-private-health-sector-during-the-private-health-sector-during-the-private-health-sector-during-the-private-health-sector-during-the-private-health-sector-during-the-private-health-sector-during-the-private-health-sector-during-the-private-health-sector-during-the-private-health-sector-during-the-private-health-sector-during-the-private-health-sector-during-the-private-health-sector-during-the-private-health-sector-during-the-private-health-sector-during-the-private-health-sector-during-the-private-health-sector-during-health-sector-during-the-private-health-sector-during-health-sector-during-the-private-health-sector-during-health-sector-during-health-sector-during-health-sector-during-health-sector-during-health-sector-during-health-sector-during-health-sector-during-health-sector-during-health-sector-during-health-sector-during-health-sector-during-health-sector-during-health-sector-dur$ 

news reports as of 20th May 2020, only 2132 claims had been made under PMJAY for Covid-19 treatment<sup>21</sup>.

In fact overall claims under PMJAY have drastically decreased since the pandemic started. This means that private hospitals are not providing health services even to non-Covid patients. There was more than 51% decline in the average weekly claim numbers during 10 weeks of the lockdown, when compared to 12 weeks before lockdown, and 76% reduction in the claimed amount in the early period of lockdown (Smith *et al.*, 2020). There was also a 3% shift in claims for women before and after the lockdown. For conditions (such as pneumonia, respiratory failure, fever etc.) that may be related to Covid-19, there was a 68% decline in number of claims in the first week of the lockdown (Smith *et al.*, 2020). While part of the reason may have been due to inability of patients to travel for treatment due to the lockdown, the major reason was that the private hospitals suspended their services or refused to admit patients under PMJAY. Throughout the pandemic government hospitals and laboratories have been providing most of the Covid-19 testing and treatment. Despite this, the NITI Aayog is reported<sup>22</sup> to have written to state governments in the midst of the pandemic, to accelerate the implementation of the PPP that involves handing over of the district hospitals to the private sector.

## 10. Resistance of people's movements to PMJAY and all other PPPs

The Jan Swasthya Abhiyan (People's Health Movement), which the author is also part of, has been involved in documentation and research on the implications of the PFHI schemes for people, especially for the poor, women, and STs and SCs communities. JSA is the Indian regional circle of the global People's Health Movement (PHM). It is constituted by 21 national networks and organisations and state level JSA units. The network partners of the JSA include a range of organisations, including NGOs working in the area of health, feminist organisations, people's science organisations, service delivery networks and trade unions<sup>23</sup>.

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<sup>&</sup>lt;sup>21</sup> https://indianexpress.com/article/business/only-5600-health-insurance-claims-coronavirus-6438004/

https://indianexpress.com/article/india/niti-aayog-to-states-speed-up-medical-colleges-on-ppp-model-6423201/lite/

<sup>&</sup>lt;sup>23</sup> http://phmindia.org/about-us/

JSA has provided a strong resistance<sup>24</sup> to all PPPs in healthcare that are seen to have negative implications for people and the government health system, through evidence-based advocacy, direct street action and collaboration with other social movements. JSA regularly analyses national and state health budgets to understand the patterns and shifts in funding among programmes and puts out statements with the analysis and demands<sup>25</sup>. JSA national and state units have been involved in highlighting cases of violation of health rights and denial of healthcare under government schemes, including PFHI schemes. JSA activists have written published research and opinion pieces both in academia and media (national and vernacular media). JSA has also organized public consultations, including public hearings in which women have come and presented their testimonials regarding their experience in accessing health care, including under PFHI schemes.

The Chhattisgarh JSA unit has been involved in a number of campaigns against privatization of health services, PPPs and PFHI schemes (Nandi, 2018). Civil society organisations, such as legal-aid organisations, community based organisations, and patient's rights groups, research institutions and workers' unions under JSA Chhattisgarh have been actively monitoring PMJAY and previous schemes and providing documentary evidence and testimonials of violations (JSA Chhattisgarh, 2014, 2018). Additionally, in Chhattisgarh, the government CHW programme, that includes the CHWs and their support structure, has been involved in monitoring and highlighting issues women face in accessing health services, including under PFHI schemes. The CHWs help patients to access the grievance redressal helpline. CHWs have shared some instances where the hospital has been forced to pay back the illegal OOP payments it had extracted from the patients. The following extract describes this role played by CHWs:

"Action on health system accountability started with raising 'local' issues, for example, absence of nurses for immunization. Then Mitanins started raising issues of absence of staff and medicines in primary health centres. They used the learning from such action to raise issues of maternal deaths due to gaps in the in-patient services of public hospitals. This experience in turn was used by Mitanins to question corruption in private hospitals around state-funded health

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<sup>&</sup>lt;sup>24</sup> http://revista.saudeemdebate.org.br/sed/issue/view/33/v.%2044%2C%20n.%20ESPECIAL%201

<sup>&</sup>lt;sup>25</sup> www.phminida.org

insurance. As their engagement with these issues increased, Mitanins were also able to point out some systemic gaps" (Garg and Pande, 2018).

State elections were held in Chhattisgarh in the months of November and December 2018, prior to which JSA and other groups had advocated for strengthening public systems through recruiting staff, improving working conditions, improving availability of medicines etc. The opposition had included these points in their manifesto. They won, bringing a change in ruling party for the first time in 15 years. Due to years of advocacy by civil society groups and the evidence of negative impact of the currently functioning PFHI scheme, the government has now developed new guidelines for the scheme which has a focus on public hospitals<sup>26</sup>. Under the revised universal healthcare scheme inaugurated in January 2020, a number of procedures related to primary and secondary care and those that were susceptible to provider induced demand have been reserved for public hospitals. There is already a reversal of the previous trend, with public sector receiving a higher share in the overall claims amount. While some ground has been reclaimed by the public sector in Chhattisgarh, the for-profit private sector continues to behave in the same way.

#### Conclusion

With the introduction of PFHI schemes, India saw a shift in the way health services were organized and financed. As the largest PPP that the Indian government has ever promoted in healthcare, the PMJAY prioritises private sector over the public health system. Healthcare is being promoted as business rather than a right.

The impact on government health services has been devastating. Public resources have been diverted to PMJAY and the public health system has been neglected and under resourced. Essential government health services such as primary healthcare services, disease control programmes, and reproductive and child health programmes are being starved of funds while the budgets for PPPs such as PMJAY have been increasing manifold. The role of the for-profit private sector in government has been legitimized, from decision making to implementing to monitoring. Collusion between public administrators (who are otherwise supposed to act on

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<sup>&</sup>lt;sup>26</sup> https://indianexpress.com/article/india/chhattisgarh-a-single-healthcare-scheme-to-raise-efficacy-accountability-6145898/

public interest) and the for-profit private sector is promoted. There has been provider and regulatory capture by the private sector.

PMJAY therefore has serious implications for women's health and their access to health services, especially for women belonging to ST, SC, poor and other vulnerable communities. Women don't have any role in decision-making or at any stage of PMJAY implementation or monitoring, but they are the ones most affected by it. There is inequitable access to healthcare under the scheme. Underfunding of the public sector that mainly caters to women, the poor and other vulnerable communities has further exacerbated inequity in access. Women and other vulnerable groups are pitted against the most powerful (for-profit private providers). The scheme enables private interests to gain control over women's bodies which are seen as means of making profit, and subjected to unnecessary procedures and treatment. Through PFHI schemes, the government has prompted women and others to trust the for-profit private sector, but has failed to put in effective regulatory or grievance redressal mechanisms. As a result, the risk is transferred to the family accessing healthcare under PMJAY, which is often, disproportionately, borne by women. The basic objective of the scheme, which is preventing OOP expenditure, is far from being realised and instead women have to face abuse and humiliation when resisting such payments. Funds that should have been spent directly on women's health have instead been routed through PMJAY. In a context of an unregulated and powerful private sector, public funding for private provisioning has proven to be a disaster for women.

People's movements have been putting up resistance against such PPPs. Even the Covid-19 pandemic has also shown that despite being continually prioritized in terms of resource allocation, PMJAY has failed to enable access to free healthcare even at a time of crisis when health services were needed the most. The Indian government must recognize the failure of PMJAY and abandon it. They must commit to strengthening the public health system for free and more equitable access to healthcare. Healthcare must be re-instated as a right.

### References

Balarajan, Y., Selvaraj, S. and Subramanian, S. V (2011) 'India: Towards Universal Health Coverage 4 Health care and equity in India', *The Lancet*. Elsevier Ltd, 377(9764), pp. 505–515. doi: 10.1016/S0140-6736(10)61894-6.

CEHAT (2016) A study of RGJAY Scheme in Maharashtra. Mumbai.

Chatterjee, P. (2018) 'National Health Protection Scheme revealed in India', *Lancet (London, England)*. Elsevier Ltd, 391(10120), pp. 523–524. doi: 10.1016/S0140-6736(18)30241-1.

Chatterjee, P. (2019) 'Hysterectomies in Beed district raise questions for India.', *Lancet*. Elsevier, 394(10194), p. 202. doi: 10.1016/S0140-6736(19)31669-1.

CII & PWC (2018) PMJAY: Creating a New Ecosystem to Provide Universal Health Coverage. New Delhi.

Dasgupta, R. *et al.* (2013) 'What the Good Doctor Said: A Critical Examination of Design Issues of the RSBY Through Provider Perspectives in Chhattisgarh, India', *Social Change*, 43(2), pp. 227–243. doi: 10.1177/0049085713493043.

Dhanaraj, S. (2016) 'Economic vulnerability to health shocks and coping strategies: Evidence from Andhra Pradesh, India', *Health Policy and Planning*, 31(6), pp. 749–758. doi: 10.1093/heapol/czv127.

Dong, D. et al. (2019) Raising the Bar: Analysis of PM-JAY High-Value Claims, PM-JAY Policy Brief 1.

Drèze, J. and Sen, A. (2013) *An uncertain glory: India and its contradictions*. New Delhi: Penguin Books.

Enríquez, C. R. (2019) Corporate Accountability and Women's Human Rights: An Analytical Approach to Public-Private Partnerships (PPPs). doi: 10.1017/CBO9781107415324.004.

Gadre, A. and Shukla, A. (2016) *Dissenting Diagnosis*. Random House.

Garg, S. (2018) 'Government Funded Health Insurance Schemes in India- Are they able to

provide services for the Scheduled Tribes Population?', in 2nd National Conference on Health Technology Assessment. Chandigarh: School of Public Health, PGI Chandigarh.

Garg, S. (2019) A Study of 'Strategic Purchasing' as a Policy Option for Public Health System in India; PhD Thesis. Mumbai: Tata Institute of Social Sciences.

Garg, S., Bebarta, K. K. and Tripathi, N. (2020) 'Performance of India's national publicly funded health insurance scheme, Pradhan Mantri Jan Arogaya Yojana (PMJAY), in improving access and financial protection for hospital care: Findings from household surveys in Chhattisgarh state', *BMC Public Health*. BMC Public Health, 20(1), pp. 1–10. doi: 10.1186/s12889-020-09107-4.

Garg, S. and Pande, S. (2018) Learning to Sustain Change: Mitanin Community Health Workers Promote Public Accountability in India. 4.

GIZ (2015) Health insurance for India's poor: Meeting the challenge with information technology. Bonn and Eschborn.

Gupta, I. et al. (2017) 'Do health coverage schemes ensure financial protection from hospitalization expenses? Evidence from eight districts in India', *Journal of Social and Economic Development*. Springer India. doi: 10.1007/s40847-017-0040-4.

Health Inc (2014) *Towards equitable coverage and more inclusive social protection in health.* Antwerp: ITGPress.

Jain, N. (2014) *Ch. 10: Rashtriya swasthya bima yojana: a step towards universal health coverage in india, India Infrastructure Report 2013*|14: The Road to Universal Health Coverage. New Delhi. Available at: http://www.idfc.com/pdf/report/2013-14/Chapter-10.pdf.

JSA (2019) 'Implications of the Interim Union Budget 2019-2020 for Health'. New Delhi: Jan Swasthya Abhiyan, pp. 1–3.

JSA (2020) 'Implications of the Union Budget 2020-21 for Health'. New Delhi: Jan Swasthya Abhiyan, pp. 1–5. Available at: http://phmindia.org/wp-content/uploads/2020/02/Budget-2020-JSA-Analysis.pdf.

JSA Chhattisgarh (2014) Report of Chhattisgarh JSA Convention. Raipur.

JSA Chhattisgarh (2018) *Press note on Chhattisgarh JSA Convention on Right to Health*. Raipur. Available at: http://phmindia.org/wp-content/uploads/2018/04/JSA\_chattisgarh\_RTH.pdf (Accessed: 11 April 2019).

Karan, A., Yip, W. and Mahal, A. (2017) 'Extending health insurance to the poor in India: An impact evaluation of Rashtriya Swasthya Bima Yojana on out of pocket spending for healthcare', *Social Science & Medicine*, 181, pp. 83–92. doi: 10.1016/j.socscimed.2017.03.053.

Kaur S., Jain N., Desai, S. (2019) *Patterns of utilization for Hysterectomy: An analysis of early trends from Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (PM-JAY)*. New Delhi.

Kaur, S., Jain, N. and Bhatnagar, P. C. (2019) Early trends from Utilization of Oncology services: insights from Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (PM-JAY). New Delhi.

Khetrapal, S., Acharya, A. and Mills, A. (2019) 'Assessment of the public-private-partnerships model of a national health insurance scheme in India', *Social Science and Medicine*. Elsevier, 243(February), p. 112634. doi: 10.1016/j.socscimed.2019.112634.

KPMG & Assocham (2019) Ayushman Bharat-A big leap towards Universal Health Coverage in India, Crisil.

Mackintosh, M. *et al.* (2016) 'What is the private sector? Understanding private provision in the health systems of low-income and middle-income', *The Lancet*. Elsevier Ltd, 6736(16), pp. 1–10. doi: 10.1016/S0140-6736(16)00342-1.

Mamidi, B. B. and Pulla, V. (2013) 'Hysterectomies and Violation of Human Rights: Case Study from India', *International Journal of Social Work and Human Services Practice*, 1(1), pp. 64–75.

Maurya, D. and Mintrom, M. (2019) 'Policy entrepreneurs as catalysts of broad system change: the case of social health insurance adoption in India', *Journal of Asian Public Policy*. Routledge, 00(00), pp. 1–17. doi: 10.1080/17516234.2019.1617955.

Maurya, D. and Ramesh, M. (2018) 'Program design, implementation and performance: the case

of social health insurance in India', *Health Economics, Policy and Law*. Cambridge University Press, pp. 1–22. doi: 10.1017/S1744133118000257.

Mukhopadhyay, I. and Sinha, D. (2018) 'Painting a Picture of Ill-health', in. New Delhi, pp. 155–179.

Nandi, S. *et al.* (2016) 'Uncovering Coverage: Utilisation of the Universal Health Insurance Scheme, Chhattisgarh by Women in Slums of Raipur', *Indian Journal of Gender Studies*, 23(1), pp. 43–68. doi: 10.1177/0971521515612863.

Nandi, S. (2018) 'Struggle against outsourcing of diagnostic services in government facilities: Strategies and lessons from a campaign led by Jan Swasthya Abhiyan (people's health movement) in Chhattisgarh, India', *Journal of Social and Political Psychology*, 6(2). doi: 10.5964/jspp.v6i2.923.

Nandi, S. (2019) Equity, access and utilisation in the state-funded universal insurance scheme (RSBY/MSBY) in Chhattisgarh State, India: What are the implications for Universal Health Coverage? (PhD Thesis). University of the Western Cape and Public Health Resource Network.

Nandi, S., Joshi, D. and Dubey, R. (2016) 'UNRAVELING THE CLINICAL ESTABLISHMENT ACT IN CHHATTISGARH: A CAMPAIGN AND A STUDY', *BMJ Global Health*, 1(Suppl 1), pp. 40–41.

Nandi, S. and Schneider, H. (2019) 'When state-funded health insurance schemes fail to provide financial protection: An indepth exploration of the experiences of patients from urban slums of Chhattisgarh, India', *Global Public Health*, (10.1080/17441692.2019.1651369).

Nandi, S. and Schneider, H. (2020) 'Using an equity-based framework for evaluating publicly funded health insurance programmes as an instrument of UHC in Chhattisgarh State, India', *Health Research Policy and Systems*. Health Research Policy and Systems, 18(50), pp. 1–14. doi: https://doi.org/10.1186/s12961-020-00555-3.

Nandi, S., Schneider, H. and Dixit, P. (2017) 'Hospital utilization and out of pocket expenditure in public and private sectors under the universal government health insurance scheme in Chhattisgarh State, India: Lessons for universal health coverage', *Plos One*, 12(11). doi:

10.1371/journal.pone.0187904.

Nandi, S., Schneider, H. and Garg, S. (2018) 'Assessing geographical inequity in availability of hospital services under the state-funded universal health insurance scheme in Chhattisgarh state, India, using a composite vulnerability index', *Global Health Action*. Taylor & Francis, 11(1). doi: 10.1080/16549716.2018.1541220.

NHA (2019) Ayushman Bharat Pradhan Mantri Jan Arogya Yojana: Annual Report 2018-19. New Delhi.

NHSRC (2012) NRHM in the Eleventh Five Year Plan (2007-2012): Strengthening Public Health Systems. New Delhi. Available at: http://nhsrcindia.org/sites/default/files/NRHM in 11th five year plan.pdf (Accessed: 20 June 2018).

NHSRC (2018) *National Health Accounts: Estimates for India FY 2015-16*. New Delhi. doi: 1088/1/153 [pii]\r10.1196/annals.1366.006 [doi].

NHSRC (no date) *Household Healthcare Utilization & Expenditure in India: State Fact Sheets.*New Delhi. Available at: http://nhsrcindia.org/sites/default/files/State Fact Sheets\_Health care Utilization and Expenditure in India.pdf.

NITI Aayog (2020) *NITI Aayog Annual Report 2019-20*. New Delhi. Available at: https://niti.gov.in/sites/default/files/2020-02/Annual\_Report\_2019-20.pdf.

Nundy, M. et al. (2013) The Rashtriya Swasthya Bima Yojana (RSBY) Experience in Chhattisgarh What does it mean for Health for All? The Rashtriya Swasthya Bima Yojana (RSBY) experience in Chhattisgarh: New Delhi.

Palacios, Robert; Das, Jishnu; Sun, C. (2011) *India's Health Insurance Scheme for the Poor:* Evidence from the Early Experience of the Rashtriya Swasthya Bima Yojana.

PHFI (2011) *A Critical Assessment of the Existing Health Insurance Models in India*. New Delhi. Available at: http://planningcommission.nic.in/reports/sereport/ser/ser heal1305.pdf.

PHRN (2017) Exploring Health Inequities amongst Particularly Vulnerable Tribal Groups: Case Studies of Baiga and Sabar in Chhattisgarh and Jharkhand States of India Report of a

study by Public Health Resource Network. Trivandrum.

Prasad, P. N. and Raghavendra, P. (2012) 'Healthcare Models in the Era of Medical Neoliberalism A Study of Aarogyasri in Andhra Pradesh', *Economic & Political Weekly*, 47(43), pp. 118–126.

Prinja, S. *et al.* (2013) 'Equity in Hospital Services Utilisation in India', *Economic & Political Weekly*, xlviiI(12), pp. 52–58.

Prinja, S. *et al.* (2017) 'Impact of Publicly Financed Health Insurance Schemes on Healthcare Utilization and Financial Risk Protection in India: A Systematic Review', *Plos One*, 12(2), p. e0170996. doi: 10.1371/journal.pone.0170996.

Prusty, R. K., Choithani, C. and Dutt Gupta, S. (2018) 'Predictors of hysterectomy among married women 15–49 years in India', *Reproductive Health*, 15. doi: 10.1186/s12978-017-0445-8.

Ramprakash, R. and Lingam, L. (2018) 'Publicly Funded Health Insurance Schemes (PFHIS): A Systematic and Interpretive Review of Studies Does Gender Equity Matter?', *eSSH*. Available at: http://www.esocialsciences.org/eSSH\_Journal/Repository/6N\_Publicly Funded Health Insurance Schemes Rajalakshmi.pdf (Accessed: 12 July 2019).

Ranjan, A. *et al.* (2018) 'Effectiveness of government strategies for financial protection against costs of hospitalization Care in India', *BMC Public Health*, 18. doi: 10.1186/s12889-018-5431-8.

Rao, M. (2009) "Health for All" and neoliberal globalisation: an Indian rope trick', in Leo Panitch & Colin Leys (ed.) *Socialist Register 2010: Morbid Symptoms*. Merlin Press, pp. 262–278. Available at: https://socialistregister.com/index.php/srv/article/view/6774 (Accessed: 20 June 2018).

Rao, M. *et al.* (2014) 'Changes in addressing inequalities in access to hospital care in Andhra Pradesh and Maharashtra states of India: a difference-in-differences study using repeated cross-sectional surveys.', *BMJ open*, 4(6), p. e004471. doi: 10.1136/bmjopen-2013-004471.

Rent, P. and Ghosh, S. (2015) 'Understanding the "Cash-Less" Nature of Government-Sponsored Health Insurance Schemes: Evidence From Rajiv Gandhi Jeevandayee Aarogya Yojana in Mumbai', SAGE Open, 1(10). doi: 10.1177/2158244015614607.

RGI & Census Commissioner (2011) *Census of India Website*. Available at: http://censusindia.gov.in/2011-Common/CensusData2011.html (Accessed: 29 May 2018).

Sen, K. and Gupta, S. (2017) 'Masking Poverty and Entitlement: RSBY in Selected Districts of West Bengal', *Social Change*, 47(3), pp. 339–358. doi: 10.1177/0049085717715557.

Sengupta, A. *et al.* (2017) 'The rise of private medicine in South Asia', *BMJ*, 357(j1482). doi: 10.1136/bmj.j1482.

SHRC CG, PHRN and WHO India (2020) *Demand Side Assessment Study of Access to Primary Healthcare in Chhattisgarh (Draft report)*. Raipur.

SHRC Chhattisgarh (2020) 'Study on Pradhan Mantri Jan Arogaya Yojana (PMJAY) in Chhattisgarh state through household surveys'. Raipur: SHRC Chhattisgarh.

Shroff, Z. C., Roberts, M. J. and Reich, M. R. (2015) 'Agenda Setting and Policy Adoption of India's National Health Insurance Scheme: *Rashtriya Swasthya Bima Yojana*', *Health Systems & Reform*, 1(2), pp. 107–118. doi: 10.1080/23288604.2015.1034310.

Smith, O. et al. (2020) PM-JAY Policy Brief 8: PM-JAY Under Lockdown: Evidence on Utilization Trends. New Delhi.

SNA (2019) 'Data of PMJAY and MSBY utilisation from September 2018 to October 2019'. Raipur: Department of Health and Family Welfare, Chhattisgarh.

Thakur, H. (2015) 'Study of Awareness, Enrollment, and Utilization of Rashtriya Swasthya Bima Yojana (National Health Insurance Scheme) in Maharashtra, India.', *Frontiers in public health*, 3(January), p. 282. doi: 10.3389/fpubh.2015.00282.

Venkat Raman, A. and Björkman, J. W. (2008) *Chapter 3: Public / Private Partnership in Health Care Services in India*. Edited by A. Venkat Raman and J. W. Björkman. Routledge.

Virk, A. K. and Atun, R. (2015) 'Towards universal health coverage in India: a historical examination of the genesis of Rashtriya Swasthya Bima Yojana – The health insurance scheme for low-income groups', *Public Health*, 129(6), pp. 810–817. doi: 10.1016/j.puhe.2015.02.002.

DRAFT for discussion

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