Job satisfaction of urban community health workers after the 2009 healthcare reform in China: a systematic review

MINGJI ZHANG¹, RONGRONG YANG², WEI WANG¹, JAMES GILLESPIE³, SUSAN CLARKE³, and FEI YAN¹

¹School of Public Health, Fudan University; Key Laboratory of Health Technology Assessment (Ministry of Health); Collaborative Innovation Center of Social Risks Governance in Health, Shanghai, China; ²Tianjin Medical Information Center, Tianjin, China; and ³Menzies Center for Health Policy, Sydney University, Sydney, Australia

Abstract

Purpose: In 2009 China introduced a new round of healthcare reform to strengthen primary care networks through the development of Community Health Services (CHS). This study aimed to measure the degree of overall job satisfaction and also satisfaction dimensions and then find common causes of dissatisfaction among Community Health Workers (CHWs) in urban China by conducting a systematic review of relevant studies on CHWs’ job satisfaction.

Data sources: Web of Science, PubMed, Google scholar, Wanfangdata and CNKI were searched.

Study selection: Publications about job satisfaction of CHWs were screened and assessed. Finally 18 Chinese articles and 4 English articles were included.

Data extraction: Quantitative and qualitative data were extracted for nine themes concerning job satisfaction. Narrative synthesis was employed to analyze the data.

Results of data synthesis: CHWs were generally neither satisfied nor dissatisfied with their work after 2009. Financial rewards and opportunities for professional development were the most important determinants of job dissatisfaction. Workers were generally satisfied with interpersonal relationships in the workplace. The expanded public health services package and human-resources related regulations, e.g. the professional rank promotion system, government-controlled staffing policy (i.e. staff-quota system) and government-controlled budgetary planning (i.e. the Separation of Revenue and Expenditure), were policies that had an effect on job satisfaction.

Conclusion: Financial rewards and professional development were the two main predictors of job satisfaction. To improve CHS in China, policy-makers (especially the central government) need to consider the impact of current policies on job satisfaction in order to reduce job dissatisfaction.

Key words: China, community health, job satisfaction, systematic review, healthcare reform

Introduction

The Chinese primary care system has faced serious shocks since the market reforms of the 1980s. Government funding has been redirected towards the secondary and tertiary health sectors, leaving the primary care sector inadequately resourced [1]. Urban patients increasingly abandoned the weakened primary care system, using secondary and tertiary hospitals for even minor ailments [2]. The result was soaring out-of-pocket expenditures and widening health disparities between the poor and the well-off [3]. In 1997, the central government of China responded to the growing crisis by establishing Community Health Services (CHS) to develop a network of primary care.
In 2009, China commenced a new round of healthcare reform marked by a new emphasis on equity. Universal health coverage was to be built on a solid foundation of affordable, accessible, higher quality primary care. To achieve these objectives, China has reinstated the role of government in financing, with priority in resource allocation, including workforce, given to primary healthcare. Reforms to improve access such as the Essential Medicines Program, Basic Public Health Services (BPHS) were also linked to a new emphasis on CHS [4].

This shift in priorities has strengthened the CHS, but with some adverse consequences for its workforce. A national survey in 2012 found that nearly 39% Community Health Workers (CHWs) had considered leaving their jobs [5]. Other surveys found that when considering career options medical graduates preferred hospital work to community health work [6] and that new recruits to the CHS had lower education level and professional rank than those departing for other jobs [7].

Studies on health services workforce stability in China and elsewhere have suggested that job satisfaction plays a central role in intent-to-stay and human resource attrition [8–12]. Job satisfaction has been defined as ‘a pleasurable or positive emotional state resulting from the appraisal of one’s job or job experiences’ [13]. Measurement focuses on both overall job satisfaction and satisfaction with particular job characteristics—such as salary, hours and other conditions—the ‘job satisfaction dimensions’ [14, 15]. Contextual factors’ influence on job characteristics are indicated by job satisfaction dimensions, which further affect overall job satisfaction, in this way overall job satisfaction is associated with contextual factors. Healthcare reform policies are pivotal contextual factors of job satisfaction, as they can impact upon various job characteristics, such as salaries, work content and career development. [9].

Healthcare reform in China influences the regulatory, managerial and physical environment of the CHS. First, most urban CHS are state-owned and subject to direct government controls over staffing, salaries and drug supply areas among others [6]. Second, there was a massive injection of public finance into its infrastructure. Twenty out of thirty-four provincial regions were reported to have over 90% of CHS meeting the Standard Construction Program requirements [16], which is an infrastructure and equipment regulation by the Ministry of Health. Third, there were major changes in the way primary care incomes were earned. Before the health reforms, grass-roots health service institutions received most of their revenue from fees-for-service. Physicians’ incomes were linked to this revenue. This created strong incentives for over-serving to increase profits. The national ‘Separation of Revenue and Expenditure Budgets (SREB)’ policy was advocated by the central government first in 2006 to counteract these perverse incentives by turning over CHS revenues to a designated government account. A special team formed by local governments managed these accounts and reimbursed the costs of CHS based on an annual budget [17, 18]. This broke the link between incomes and fees, allowing for budgetary planning. At the same time, it reduced the financial autonomy and managerial independence of CHS and created an inflexible staff salary structure as control of revenue and expenditure came under the governments. Finally, the Ministry of Health developed BPHS as a way of utilizing CHS to combat the rise of non-communicable diseases (NCDs) [4]. BPHS consist of about eleven public health services with detailed guideline, most of which are new services to CHS, targeting pregnant women, children, the elderly and NCD patients among others. Consequently, public health function of CHS has been enhanced.

**Purpose**

These reforms have caused major changes to the working environment of CHWs. As a result, there have been numerous studies on the effects of changes on the various dimensions of job satisfaction within the CHS. Most of these studies have been restricted to particular localities, making it difficult to draw strong conclusions for national policy. Studies since 2009 have found that the percentage of CHWs reporting satisfaction with their work lay between 40% and 70% [19–21]. Predictors of job satisfaction differed in studies, ranging from demographic factors [5, 22, 23], specific job characteristics [24–26] and broader effects of regulation on the workplace [27–29]. Given this fragmented evidence and taking China’s vastness into consideration, systematic review methods provide a way to draw together local results to measure the degree of overall job satisfaction and satisfaction dimensions as well as to analyze the common factors shaping the job satisfaction of urban community health workers in China.

**Methods**

Articles providing original research on the satisfaction of CHWs published after 2009 were reviewed. A systematic review protocol was developed in advance. Primary studies used diverse methods and questionnaires, which made meta-analysis difficult, so a narrative synthesis was developed using the ESRC Methods Programme [30].

**Data sources and searching strategy**

A literature search was conducted in March 2014 and repeated using the same search strategy in July to update new literature. Web of Science, Pubmed and Google Scholar were used to search for English-language publications. Keywords and their synonyms and combinations were searched: ‘China’, ‘community health’ or ‘primary health’, ‘job satisfaction’ or ‘work satisfaction’ or ‘career satisfaction’. Publications in Chinese were searched using Wanfang data and CNKI, two major search engines covering Chinese-language academic literature. Similar keywords in Chinese were adopted. Publication types were limited to dissertations and peer reviewed journal articles. Additional relevant publications were identified using the reference lists of the selected articles.

**Study selection**

Inclusion criteria were as follows: (1) original research, (2) focusing on CHWs’ job satisfaction and/or its predictors, (3) studies of urban areas of China mainland and (4) Chinese or English language. With these criteria, two reviewers collaborated to exclude the irrelevant articles; divergent judgments were solved by discussion. Figure 1 displays these screening and appraisal procedures.

**Quality appraisal**

All of the studies are cross-section studies, and no study was found with a clear qualitative design. Consequently, we adopted the Joanna Briggs Institute (JBI) critical appraisal instrument (MAStARI for descriptive studies) [31] as the quality appraisal instrument. Reviewers then assessed the quality of articles independently. There were two mixed-methods studies [28, 32] in which researchers used interviewing as well as survey. In this case, to ensure the quality of qualitative results reviewers also appraised qualitative evidence with the qualitative study appraisal instrument of the JBI Qualitative Assessment and Review Instrument (QARI) [31].
Information from the two mixed-methods studies were extracted and assessed with QARI criteria. We found that these two studies mainly followed a quantitative paradigm and did not provide clear qualitative design, including philosophical orientation and an explicit qualitative methodology. As a result, the congruity among epistemology, methodology, research question and methods could not be decided by the information from the articles. Actually, the lack of explicitly discussed study design in mixed-methods studies, especially the qualitative part, was not rare [33].

However, data collection and analysis methods used in the two studies were clearer. Both studies applied semi-structured interviewing to collect participants’ understanding of their work experience, and thematic analysis to explore reasons of job dissatisfaction. Also, the voice of participants were represented, and findings were supported by illustrations. Consequently, the reviewers decided the findings were credible, and evidence from these studies has been incorporated in this review.

Data extraction
We developed customized data extraction forms to extract information. Though no pure qualitative research was found, interview quotations from mixed-methods studies and authors’ interpretation of their findings were extracted as qualitative data.

Satisfaction dimensions were diverse in different studies, so we grouped dimensions by conceptual affinity. Closely-related dimensions were categorized as one theme (Table 1). With the qualitative data, we tabulated textual segments under each theme and classified them as reciprocal (supporting or complementing each other) or refutational (disagreeing) arguments. For the quantitative data, we transformed different calculations of overall job satisfaction into a common rubric of five-point scores. Original five ratings for satisfaction were as follows: (1) for ‘very dissatisfied’ (VD), (2) for ‘dissatisfied’ (DS), (3) for ‘not sure’ (NS), (4) for ‘satisfied’ (ST) and (5) for ‘very satisfied’ (VS). We identified three distinct ways of measuring overall satisfaction in the included articles (Table 2). First, eight studies presented standalone items of overall satisfaction. Percentages of overall satisfaction levels were converted into five-point scores (overall satisfaction = VD% × 1.0 + DS% × 2.0 + NS% × 3.0 + ST% × 4.0 + VS% × 5.0). One study with a four-point Likert scale was converted to a five-point scale by adding a null ‘not sure’ option, as a neutral mid-point. Second, four studies summed up the scores of all the dimensions as overall satisfaction and we also converted them into five-point scores (overall satisfaction = summed score/maximum total score × 5.0). Third, where the original studies used a five-point overall satisfaction score, this was directly adopted. Furthermore, we defined intervals for overall satisfaction scores: scores from 0 to 1.9 were defined as VD, 2.0 to 2.9 as DS, 3.0 to 3.4 as NS, 3.5 to 3.9 as ST and 4.0 to 5.0 as VS. This defining of levels of satisfaction is to approximate the original ratings of satisfaction.

Included studies were grouped according to data collection year (pre-2009 inclusive vs. post-2009) and socioeconomic regions (East, Middle, West or nationwide China). Generally, East China is more developed economically than Middle China while West China is the least developed.

Results of data synthesis
Characteristics of reviewed studies
A total of 33 English articles and 144 Chinese articles were identified after searching. After application of the inclusion criteria, only 18 Chinese and 4 English studies remained. Except for two nationwide surveys, studies were conducted locally or regionally, six at district
level, nine at city level, and five at province level. Ten studies collected data before 2009 (inclusive), eleven studies after 2009, and one study as a repeated cross-sectional study in Anhui province conducted in 2009 and 2011 [22].

### Overall job satisfaction scores
Overall satisfaction scores from 13 articles consisted of 14 investigation samples, as one study provided data of two cities (Shenyang and Benxi) separately. The overall satisfaction scores ranged from 3.0 to 3.8 points, and the scores of 10 samples were at the level of ‘not sure’, 4 samples were at the level of ‘satisfied’ (Table 2). Meta-analytic methods of combining results showed that whether weighted by sample size or by inverse variance, the overall satisfaction mean of post-2009 phase belonged to the level of ‘not sure’. Weighted by inverse variance, the overall satisfaction mean of pre-2009 phase just reached the level of ‘satisfied’ (Table 3).

### Themes of job satisfaction
Sixteen articles depicted various job satisfaction dimensions with response data. Figure 2 displays how dimension scores for each theme were distributed among five satisfaction levels. It can be seen that interpersonal relationships brought the most positive satisfaction results, while questions concerned with respect and infrastructure also scored positively. In contrast, CHWs were not satisfied with financial rewards, governance and career development.

#### Theme 1: financial rewards
Dimensions grouped under the theme of financial rewards covered income/salary, benefits and the methods of payment distribution. In 13 out of 16 studies, financial rewards ranked lowest in job satisfaction dimensions. In three other studies, respondents were ‘dissatisfied’ with financial rewards. In one study only 20%–30% of participants reported satisfaction with their financial rewards [41]. Overall the data revealed marked dissatisfaction about financial rewards.

Healthcare reform policies were often regarded as the culprits for this dissatisfaction. Studies in Beijing and Tianjin concluded that the implementation of the BPHS added disproportionately heavy workloads on CHS staff, while income still lagged behind that of hospital workers [24, 34]. The SREB reforms, under which CHWs’ salary depended in major part on the funding capacity of local government rather than fees and other CHS earnings, also came in for blame. Local government control led to perceived inequity, as income levels differed between local districts [42]. CHWs in districts with strong public finances (such as Tianjin) were mostly satisfied with financial reward [24], while workers in areas with weak public finances were generally dissatisfied [38]. In Beijing, the self-generated income of previously better-off CHS declined, while CHS with poorer revenue streams saw their income increased through SREB. Consequently, those whose income declined were dissatisfied, while the beneficiaries of SREB became more satisfied and motivated [34].

#### Theme 2: governance
The CHS lack managerial independence. Part of their human resource and financial management powers remain in the hands of government departments and ‘owners’ (the parent companies or hospitals that founded, financed and continue to part controlled the CHS). A shared-governance model has emerged, including the internal management of the CHS, and external control from the owner and government regulation. Scores for governance satisfaction from 13 studies varied between 2.3 and 4.0. Four studies rated ‘satisfied’ or ‘very satisfied’, four rated ‘dissatisfied’ and five other studies rated ‘not sure’.

CHS had their origins in a variety of sources (e.g. first or secondary public hospitals or public-enterprise affiliated clinics). Their governance arrangements reflect these origins and are often shared across several organizations. In study of Chongqing [28] ‘Governance structure, personnel administration power and salary management are all dependent on the parent company, at the same time following the orders from the health bureau. This causes a lot of confusion and conflicts.’ This was also found to be a concern in the study of Beijing, which
In Shanghai, the quota of professional ranks had been despite major differences in job descriptions and available resources. For CHWs, were the same as for health workers in tertiary hospitals, research requirements and occupational training. Scores from 13 studies ranged between 2.7 and 4.2. Nearly half (six studies) returned ratings of very satisfied; only one study had the rating ‘not sure’.

One explanation was that the CHS place a high value on cooperation, as the BPHS is provided by the CHS GP team. Workers within teams co-operate closely and are more likely to cultivate harmonious personal relationships [38]. Public health workers in a general medicine team reported greater satisfaction with colleague relationships than other specialties of CHWs [22]. Good interpersonal relationships can also explain why grass-root health workers continued to work at CHS despite their complaints about low pay and heavier workloads [40].

### Theme 5: respect
This theme included professional recognition, societal recognition and respect from patients. Seven out of eleven studies recorded ‘satisfied’; six gave ratings of ‘very satisfied’ for this theme, three articles reported respondents were ‘not sure’, while one article gave a rating of ‘dissatisfied’. All four studies reporting CHWs’ dissatisfaction with respect came from East China. In contrast, all the West China studies rate the respect theme as ‘satisfied’ or ‘very satisfied’. This may suggest that societies in West China value CHS more than societies in East China (Mann-Whitney U Test, sig = 0.007).

### Table 2 Overall satisfaction scores of included studies

<table>
<thead>
<tr>
<th>Study</th>
<th>Phase</th>
<th>Area</th>
<th>Sample size</th>
<th>Measurement of scales</th>
<th>Measurement of overall satisfaction</th>
<th>Job satisfaction score</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sun et al. [34]</td>
<td>Pre</td>
<td>East</td>
<td>510</td>
<td>Likert 5 point</td>
<td>Sum of dimension scores</td>
<td>3.0</td>
<td>Not of 5-point measurement</td>
</tr>
<tr>
<td>Ding [22]</td>
<td>Pre</td>
<td>Middle</td>
<td>765</td>
<td>Likert 5 point</td>
<td>Sum of dimension scores</td>
<td>3.1</td>
<td>Not of 5-point measurement</td>
</tr>
<tr>
<td>Guo et al. [35]</td>
<td>Pre</td>
<td>East</td>
<td>124</td>
<td>Likert 5 point</td>
<td>Standalone item</td>
<td>3.1</td>
<td>0.59</td>
</tr>
<tr>
<td>Han et al. [24]</td>
<td>Pre</td>
<td>East</td>
<td>267</td>
<td>Likert 5 point</td>
<td>Standalone item</td>
<td>3.2</td>
<td>Unavailable</td>
</tr>
<tr>
<td>Lai et al. [20]</td>
<td>Pre</td>
<td>East</td>
<td>309</td>
<td>6 point</td>
<td>Sum of dimension scores</td>
<td>3.4</td>
<td>Not of 5-point measurement</td>
</tr>
<tr>
<td>Chou (2009)</td>
<td>Pre</td>
<td>East</td>
<td>868</td>
<td>Likert 5 point</td>
<td>Standalone item</td>
<td>3.5</td>
<td>0.92</td>
</tr>
<tr>
<td>Qiao et al. [36]</td>
<td>Pre</td>
<td>West</td>
<td>241</td>
<td>Likert 5 point</td>
<td>Standalone item</td>
<td>3.7</td>
<td>0.88</td>
</tr>
<tr>
<td>Wang et al. [37]</td>
<td>Pre</td>
<td>East</td>
<td>472</td>
<td>Likert 5 point</td>
<td>Standalone item</td>
<td>3.8</td>
<td>0.8</td>
</tr>
<tr>
<td>Tang [28]</td>
<td>Post</td>
<td>West</td>
<td>614</td>
<td>4 point</td>
<td>Standalone item</td>
<td>3.3</td>
<td>1.17</td>
</tr>
<tr>
<td>Xiong [38]</td>
<td>Post</td>
<td>West</td>
<td>286</td>
<td>Likert 5 point</td>
<td>Standalone item</td>
<td>3.3</td>
<td>0.85</td>
</tr>
<tr>
<td>Yang et al. [21]</td>
<td>Post</td>
<td>West</td>
<td>314</td>
<td>Likert 5 point</td>
<td>Standalone item</td>
<td>3.3</td>
<td>0.79</td>
</tr>
<tr>
<td>Ge et al. [39]</td>
<td>Post</td>
<td>East (Shenyang)</td>
<td>1010</td>
<td>Likert 5 point</td>
<td>Sum of dimension scores</td>
<td>3.4</td>
<td>Not of 5-point measurement</td>
</tr>
<tr>
<td>Shi et al. [40]</td>
<td>Post</td>
<td>Nationwide</td>
<td>308</td>
<td>Likert 5 point</td>
<td>Average of dimension scores</td>
<td>3.4</td>
<td>0.74</td>
</tr>
<tr>
<td>Ge et al. [39]</td>
<td>Post</td>
<td>East (Benxi)</td>
<td>684</td>
<td>Likert 5 point</td>
<td>Sum of dimension scores</td>
<td>3.5</td>
<td>Not of 5-point measurement</td>
</tr>
</tbody>
</table>

*a*Pre represents pre-reform phase before 2010, ‘post’ represents post-reform phase of 2010 and afterwards, it is the same with tables afterwards.

*b*We converted these scores from the sum of dimension scores into 5-grade score: Overall satisfaction = summed score/maximum total score × 5.0.

*c*We converted these scores from percentage of different levels of overall satisfaction: Overall satisfaction = \(VD\% × 1.0 + DS\% × 2.0 + NS\% × 3.0 + ST\% × 4.0 + VS\% × 5.0\).

*d*It was pooled standard deviation.

### Theme 3: career development
Career development included issues such as professional rank promotion and occupational training. Scores from 13 studies ranged between 2.7 and 4.2. Nearly half (six studies) returned ratings of ‘dissatisfied’ while four articles gave ratings of ‘satisfied’ or ‘very satisfied’. The other three studies were ‘not sure’.

Professional rank promotion system was described as ‘unfair’ [28]. The study in Anhui argued that the existing professional rank promotion put too much stress on academic achievements, which set difficult challenges for grass-root health workers [22]. Research requirements for CHWs were the same as for health workers in tertiary hospitals, despite major differences in job descriptions and available resources. In Shanghai, the quota of professional ranks had been fixed by a regulation enacted in 1999 and was considered outdated by the current workers [37].

### Table 3 Means of overall job satisfaction scores using different weighting methods

<table>
<thead>
<tr>
<th></th>
<th>Weighted by sample size</th>
<th>Weighted by inverse variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of included samples</td>
<td>Mean</td>
<td>Number of included samples</td>
</tr>
<tr>
<td>All included studies</td>
<td>14</td>
<td>3.4</td>
</tr>
<tr>
<td>Pre-2009 studies</td>
<td>8</td>
<td>3.3</td>
</tr>
<tr>
<td>Post-2009 studies</td>
<td>6</td>
<td>3.4</td>
</tr>
</tbody>
</table>

suggested that the managerial power shared by the owners of CHS resulted in weakened regulation by the health bureau [34].
A study of Tianjin (East China) observed the lowest score (2.7), with the CHWs complaining that CHS were not yet respected by the community [24]. This lack of respect could be due to patients’ distrust of the professional skills of CHWs as well as viewing doctors as profit-driven [32].

Theme 6: infrastructure
Infrastructure included the buildings and equipment available to the CHS. Twelve studies assessed CHWs’ satisfaction with infrastructure. The results were mixed, with scores ranging from 2.9 to 4.6. Six studies reported ratings of ‘satisfied’ or ‘very satisfied’, one study found respondents ‘dissatisfied’, the other five had ratings of ‘not sure’.

The highest score for infrastructure (4.6) was found in the West China city of Chengdu [42], which was attributed to the completion of Standard Construction Program for CHS at the end of 2007. Studies of Taizhou city [35], Tianjin [24] and Chongqing [38] support a similar interpretation.

Theme 7: work itself
Work itself indicates intrinsic aspects of a job, e.g. work content, autonomy and job enrichment, as opposed to extrinsic characteristics, e.g. the salary, respect and social status that are results of the position. Ten articles had scores ranging from 2.2 to 4.5, half of which gave ratings of ‘satisfied’ or ‘very satisfied’ while three articles gave ratings of ‘dissatisfied’. The other two studies reported respondents were ‘not sure’. BPHS policy encouraged the view held by some CHWs that CHS work was tedious and without a sense of achievement [32]. Many who had previously worked in hospital settings experienced ‘transition-maladjustment’ when moving to the CHS setting [41, 38] where workers are required a different skill set [36] in order to provide BPHS as well as medical services.

Theme 8: work stress
Work load, work time (i.e. the hours of work) and work pressure were classified as ‘work stress’. Eight studies had scores for this theme from 2.1 to 4.0. Three studies returned a rating of ‘dissatisfied’, two studies were ‘satisfied’ or ‘very satisfied’, and the other three were at the level of ‘not sure’. One criticism was that the reform had expanded the scope of BPHS and increased workload without equivalent staffing increase [39].

Theme 9: job security
Job security included issues surrounding stability of employment and the likelihood of an enforced career change. Three studies investigated this aspect of job satisfaction, and the results were divergent: two at city level returned a rating of ‘dissatisfied’, one at national level was ‘satisfied’.

A reason mentioned for concerns about job security was the staff-quota policy, which sets ceilings on staff numbers in Chinese public health institutions with consequences for public-financed salaries. In spite of an equivalent position and workload, staffs out-of-quota were trapped on lower pay rates than staff in-quota, with less job security and uncertain career expectations [32].

Predictors of overall job satisfaction. Of 22 included articles, 8 articles applied logistic or linear regression using a standalone overall job satisfaction rating as the dependent variable. Five studies tested the relationship of overall satisfaction to socio-demographic characteristics in regression analysis. Three of these found no statistical significance [40, 36, 43]. However, age and work-year were reported as predictors of overall job satisfaction in Anhui [22]. Occupation and age were reported as predictors in Heilongjiang [44].

Job satisfaction dimensions are indicators of workers’ emotional assessment of job characteristics and were treated as predictors of overall job satisfaction. In all eight studies, financial reward was the most frequently reported predictor (by seven studies). Career development was second to it, reported by six studies as predictors, governance and infrastructure by four studies, respect by three studies, interpersonal relationship and work itself by two studies.
Discussion

There was a strong consensus that CHWs were not satisfied with their financial rewards. Poor remuneration incentives and the lack of a suitable professional promotion system were the most common reasons for community health worker dissatisfaction in urban China.

Financial rewards and career development had been problematic for years. In 2005, the main reasons given for intention to leave among CHWs in China were noted to be ‘low salaries, limited opportunities for professional development’ [45]. In 2014, researchers still found financial reward and career development to be barriers to work motivation [46]. A perception of inequity appears to undergird much of the dissatisfaction with financial rewards. CHWs perceived their salaries as significantly lower than their colleagues in secondary and tertiary hospitals. A study of Guangzhou found ∼78% CHWs earned <50,000 CNY per year in 2012 [32], whereas annual income for an average health worker was 92,243 CNY in 2012 [47]. Increasing expectations as a result of China’s booming economy has also worsened this feeling of inequity.

These findings are similar to studies performed in some low- and middle-income countries [48]. Studies in Ghana and Malawi suggested that low salaries, delayed promotions and inadequate training were the most common reasons for job dissatisfaction [49, 50]. However, some studies of healthcare workers in India found that medical officers were intrinsically motivated to accept positions in the public health sector and that poor financial reward did not necessarily contribute to dissatisfaction [51, 52].

Another consensus was that CHWs were satisfied with their interpersonal relationships. However, interpersonal relationship was rarely identified as predictor of overall job satisfaction, which suggests interpersonal relationship may not be as important for job satisfaction as financial reward in China. Meanwhile, good interpersonal relationship and positive cultural climate were more important for job satisfaction among community health workers in western countries than was financial reward [53, 54].

It is interesting to note that job characteristics which influenced job satisfaction were affected by health service policies and personnel regulation. Although the intention of SREB policy was to make workers concentrate on service provision rather than profit making [17], it appears to have caused unintended consequences: the lack of financial managerial power for the CHS and the continuation of egalitarian salaries has caused dissatisfaction over financial rewards [55, 56]. Likewise, while the introduction of the BPHS was supposed to enhance the public health service at a grass-roots level, it served to aggravate the perception of income inequity among CHWs with heavy workload of public health service and marginal income increase [57, 58]. Obsolete personnel regulations such as the profession-rank promotion system and staff-quota policy were also accused commonly as sources of job dissatisfaction. These negative consequences of policies have been noted in earlier explorations of the impact of policies on worker satisfaction [9].

These findings suggest policy-makers, especially the central government (because health reform basically follows a centralized pattern in China), need to assess policies concerning community health for possible effects on job satisfaction. Attention to improving financial remuneration for workers in a manner that will be perceived as equitable and motivating as well as attention to a suitable professional promotion system for CHWs will help to reduce the current dissatisfaction and strengthen primary care networks.

Limitations

The quality of this review is constrained by these facts: first, interpretation and interview quotes of original studies were mainly problems and critics, positive thoughts of CHs were scanty; second, the variety of questionnaires restricted study comparison and results integration of job satisfaction literature; lastly, no qualitative research was found to explain behavior and culture of CHWs.

Conclusion

CHWs—the main professional workforce sustaining primary healthcare networks in China—were neither satisfied nor dissatisfied with their jobs, while dissatisfied with the financial rewards. This was balanced by perceptions of interpersonal relationship as more likely to be ‘satisfactory’. Views on financial rewards and career development were important predictors of overall job satisfaction. Job satisfaction was affected by health policies such as BPHS, the Separation of Revenue and Expenditure Budgets, the professional promotion system, and the staff-quota system.

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References