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Incentives on the motivation and job performance; insights from community health workers in Iran

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Abstract

Background Enhancing workforce motivation in primary health care systems is crucial to improving both program sustainability and service quality. Given this necessity, this study investigated how stakeholders perceive and prioritize financial and non-financial incentives, based on fundamental principles of motivation theory.

Methods This study utilized a directed qualitative content analysis approach to rigorously examine data within the framework of Herzberg's Two-Factor Theory. The participants purposefully involved a sample of 25 individuals from the primary health care workforce in the Tehran province. To gather data, semi-structured interviews were carried out. The analysis began with an initial familiarization phase. Interview transcripts were read multiple times to enable a holistic understanding of content and context. Meaning units were identified and labeled based on the conceptual categories derived from the framework. The analysis was performed manually and with the assistance of ATLAS.ti software (version 8).

Results An analysis of the perspectives, 64% of participants reported a very high level of importance for financial incentives vs. non-financial. The majority agreed with the payment of a fixed salary in addition to performance-based incentives, considering both quantitative and qualitative criteria. Most important subthemes, including level of importance of incentives, mechanisms of incentives, interval of incentives, methods of incentives, administer of incentives, criteria of incentives, and adherence to fairness. Some participants perceived financial and non-financial factors as complementary elements in fostering motivation and enhancing performance. One key finding indicates that emphasizing non-financial incentives (respect, and prompt appreciation, outstanding employees), while also considering each individual's unique needs and circumstances, is crucial.

Conclusions This study suggests a degree of flexibility in the boundaries between the two categories of Herzberg's theory, particularly in specific cultural and economic settings. Taken together, these results highlight the critical importance of designing integrated strategies that simultaneously address extrinsic and intrinsic incentives to enhance the performance of the health care workforce.

Keywords Motivation theory, Community health workers, Performance, Incentives

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Background

Enhancing workforce motivation in primary health care systems is crucial to improving both program sustainability and service quality. A motivated employee leads to lower burnout and turnover, which in turn ensures more consistent care [1, 2].

A variety of motivational theories have been introduced in the academic literature, each highlighting different dimensions of this complex phenomenon. Among the most well-known are Maslow's Hierarchy of Needs, Herzberg's Two-Factor Theory, Expectancy Theory, and Incentive Theory [3, 4]. Of these, Herzberg's Two-Factor Theory stands out as a practical framework for examining the drivers of employees' motivation, particularly due to its clear categorization of motivational factors. According to this theory, motivational factors are broadly divided into two categories: extrinsic incentives and intrinsic incentives. The extrinsic factors, also referred to as hygiene factors, encompassing salary structures, employment stability, and physical work environments, and institutional policies—function as baseline organizational prerequisites —are primarily extrinsic and prevent dissatisfaction, they do not inherently lead to motivation. In contrast, the intrinsic factors, known as motivators, include opportunities for growth and advancement, recognition of performance, responsibility, and the meaningfulness of work. This distinction provides a valuable analytical lens for developing human resource strategies aimed at improving employees' engagement, performance, and organizational effectiveness [5, 6].

According to the World Health Organization (WHO), the use of both financial and non-financial incentives for Community Health Workers (CHWs) is an effective tool for improving health outcomes in communities [2]. Financial incentives constitute a crucial mechanism for the recruitment and retention of community health workers (CHWs) in low- and middle-income countries (LMICs). This is particularly relevant for women, who frequently enter the CHW workforce seeking in come generation and economic empowerment amid constrained employment opportunities. In such contexts, financial compensation serves not only as a motivator but also as a means to enhance the sustainability and effectiveness of CHW programs [2, 7–10]. The establishment of effective payment mechanisms tailored to workload, responsibilities, and service area, as well as the necessity of a robust monitoring system, were highlighted as crucial payment requirements [2, 11].

The findings of recent studies indicate that non-financial incentives play a critical role in motivating community health workers (CHWs), particularly among volunteers and those dedicated to social service. Key factors such as recognition, supportive supervision, training opportunities, and a sense of community belonging significantly enhance the motivation and performance of CHWs [1, 2, 12]. Additionally, evidence underscores that intrinsic motivators, including altruism and social respect, often sustain engagement when financial rewards are limited. Such factors contribute to a sense of value and commitment among healthcare workers, thereby increasing their likelihood of contributing to the organization's success [1, 2, 12–14]. In the context of Iran, community health workers, referred to as Behvarz, are employed by the government and receive a monthly salary. This financial compensation serves as a substantial motivator for both entering the profession and performing effectively [7].

Selecting the most effective approach for CHWs has been an established policy challenge within primary health care [2]. However, there seems to be no clear consensus on which financial or non-financial method is the best. In addition, for effective implementation of financial incentives, it is necessary to specify their types and categories, as well as determine their funding sources to ensure their sustainability [2, 7–13].

To identify the most efficient and impactful strategy, it is essential to thoroughly assess all relevant factors and analyze various perspectives, whether financial or otherwise, that best motivate CHWs, along with broader considerations like the duration and scope of CHW training and the level of effort required in their tasks and role [2]. There are limited studies in this regard in the country. Therefore, this study was conducted to examine stakeholders' perceptions regarding the meaning and significance of financial and non- financial incentives, along with their respective dimensions, within the framework of two- factor theory motivation.

Methods

Study setting and participants

The present study was conducted in 2024 after obtaining ethical approval and ensuring confidentiality within Pakdasht healthcare network. Pakdasht County is located in the southeastern of Tehran Province and consists of three cities: Pakdasht, Sharifabad, and Forunabad. According to the latest population statistics, the county has a total population of 475,918 and 11 Comprehensive health services center and 21 Home health. The participants in this research recruited from the primary health care staff are composed of a diverse range of healthcare center managers, midwifery experts, and rural insurance doctors, as well as CHWs (Behvarzs) employed in Pakdasht healthcare network (Table 1).

The inclusion criteria consisted of residence in the study area for CHWs and at least one year of experience in the rural insurance program for both doctors and midwifery experts, as well as satisfaction with participation and collaboration in the research for all participants. A

Table 1 Participants' demographic characteristics

Job Position	Number of participants	Age	Gender	Employment history*	Educational level	Place of service
Managers	M1	53	Male	27	MD	Health network headquarters
	M2	48	Male	18	MD	Health network headquarters
Rural insurance doctor	RID1	39	Male	12	MD	Comprehensive health services center
	RID2	35	Female	25	MD	Comprehensive health services center
	RID3	57	Male	20	Family medicine specialist	Comprehensive health services center
Rural insurance midwifery experts	RIM1	42	Female	16	Bachelor	Comprehensive health services center
	RIM2	30	Female	7	Bachelor	Comprehensive health services center
	RIM3	39	Female	10	Bachelor	Comprehensive health services center
	RIM 4	42	Female	15	Bachelor	Comprehensive health services center
	RIM5	45	Female	17	Bachelor	Comprehensive health services center
Behvarzs (CHWs)	CHW1	37	Female	11	High school diploma	Home health
	CHW2	46	Female	25	High school diploma	Home health
	CHW3	32	Female	6	High school diploma	Home health
	CHW4	33	Female	10	High school diploma	Home health
	CHW5	46	Female	25	High school diploma	Home health
	CHW6	35	Female	13	High school diploma	Home health
	CHW7	38	Female	11	Bachelor	Home health
	CHW8	36	Female	13	High school diploma	Home health
	CHW9	38	Female	13	High school diploma	Home health
	CHW10	29	Female	4	High school diploma	Home health
	CHW11	33	Male	6	High school diploma	Home health
	CHW12	52	Male	22	Primary school	Home health
	CHW13	33	Male	6	High school diploma	Home health
	CHW14	41	Male	13	High school diploma	Home health
	CHW15	48	Male	21	High school diploma	Home health

*: years

purposeful sampling method was employed to recruit participants until data saturation was achieved.

Study design

The current research was conducted using explorative qualitative content analysis methods along with directed approach (DQCA). Qualitative content analysis, like other qualitative studies, deals with concepts and texts. This method also involves identifying semantic units, codes, categories/subthemes, and themes. This process helps in the deeper exploration and organization of the data [15, 16]. This research utilizes Herzberg's Dual-Factor Theory as its foundational analytical framework. The theory delineates two orthogonal determinants of professional motivation: hygiene factors and motivators [5, 6].

The Fig. 1 illustrates the conceptual framework of the current study based on Herzberg's Two-Factor Theory, taking into account the specific contextual conditions (socio-economic status), in which incentives to financial and non-financial factors were categorized. These two categories of incentives may directly or indirectly influence work incentives and, consequently, contribute to increased job satisfaction, enhanced sense of autonomy, improved motivation, and better performance in the workplace (Fig. 1).

Data collection method

Data were collected through semi-structured interviews. Prior to data collection, an interview guide was developed to standardize the process. The guide detailed the formulation of interview questions, interview techniques, scheduling of interviews, participant selection and coordination—including explaining the study objectives to participants and obtaining their informed consent—the estimated duration of interviews, recording procedures, and measures to ensure confidentiality and data protection.

Interview questions were developed based on the study objectives, field inquiries, and a thorough review of relevant literature (Table S1). The questions were predominantly open-ended and semi-structured to allow for an in-depth exploration of participants' experiences and perspectives. Clarity and comprehensibility of questions were prioritized, and follow-up prompts were used as needed to elicit comprehensive responses.

Interviews were conducted face-to-face at participants' workplaces, scheduled in advance with their consent. Each interview had a duration of around one hour. Semi-structured interviews were carried out between 12 January 2024 and 15 July 2024. All interviews were audio-recorded using a digital recorder. Participants were

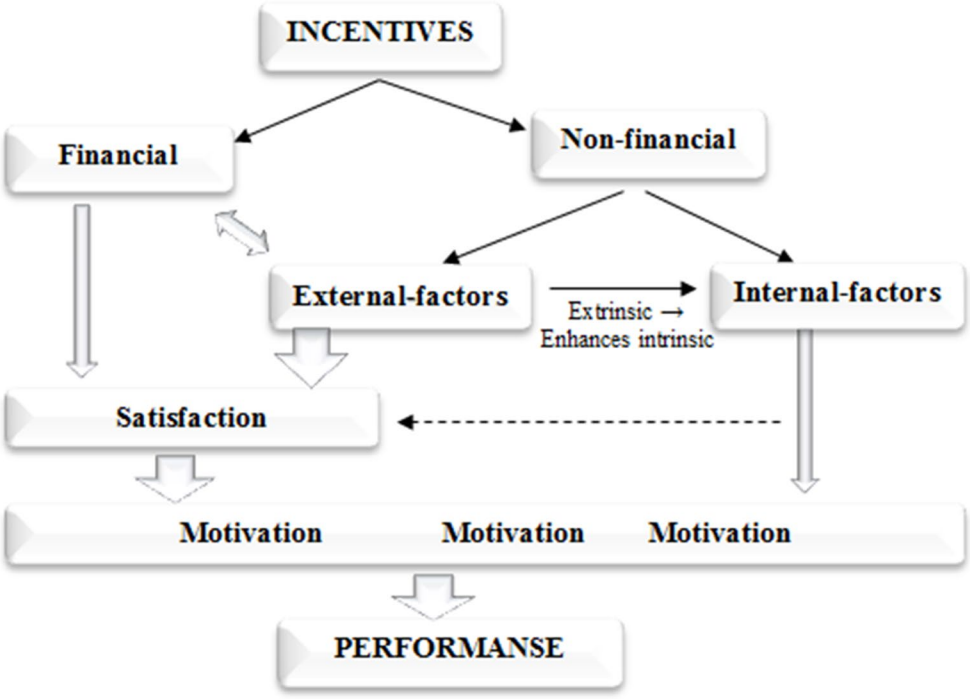

Fig. 1 Conceptual framework illustrating the hypothesized pathways through which incentives for Community Health Workers (CHWs)

assured of confidentiality, and data were anonymized using coded identifiers during analysis.

Data analysis

The data analysis followed a combined deductive–inductive approach, in accordance with established procedures for directed content analysis. This approach combines the flexibility of inductive analysis with the precision of deductive analysis, allowing for a thorough exploration of the complex relationships between various concepts within the data [17].

A conceptual framework derived from Herzberg's Two-Factor Theory was developed to guide the initial coding process. Rather than adhering strictly to Herzberg's original categories of "motivators" and "hygiene factors," the framework reinterpreted these into two overarching dimensions: financial (extrinsic) incentives and non-financial (intrinsic and extrinsic) incentives. Based on this revised structure, a set of a priori codes was constructed to reflect the main conceptual domains (Fig. 1).

The analysis began with an initial familiarization phase. Interview transcripts were read multiple times to enable a holistic understanding of content and context. In the next stage, meaning units were identified and labeled based on the conceptual categories derived from the framework. The extracted codes were then organized into the two major conceptual themes. Within each category, sub-themes were inductively identified. Finally, all codes and themes were reviewed and compared against the conceptual framework to ensure consistency and alignment. The analysis was performed manually and with the assistance of ATLAS.ti software. Relationships between central themes, sub-themes and codes showed by ATLAS.ti version 8 (Fig. 2).

Validity and reliability

To ensure comprehensive and accurate findings, participants were selected based on a diversity of experiences and occupational features and backgrounds. Sampling continued until theoretical saturation was reached across all semantic units. In order to enhance the credibility of the data, each interview was transcribed and meticulously reviewed multiple times, with semantic units being thoroughly and precisely compiled. Ultimately, the accuracy of the extracted codes and categories was validated by multiple interviewers and two researchers.

Results

The demographic characteristics of the participants are provided in Table 1. Data saturation was achieved through interviews with 25 participants, including 15 CHWs, 5 Rural insurance midwifery experts (coded as RIM), 3 Rural insurance doctors (RID), and 2 managers (coded as M).

As shown in Table 1, the research participants consisted of 9 (36%) males and 16 (64%) females. Most participants (48%) held a high school diploma.

In the initial code extraction phase, 461 codes were extracted. Following a review and evaluation of the extracted codes, a process of integration and

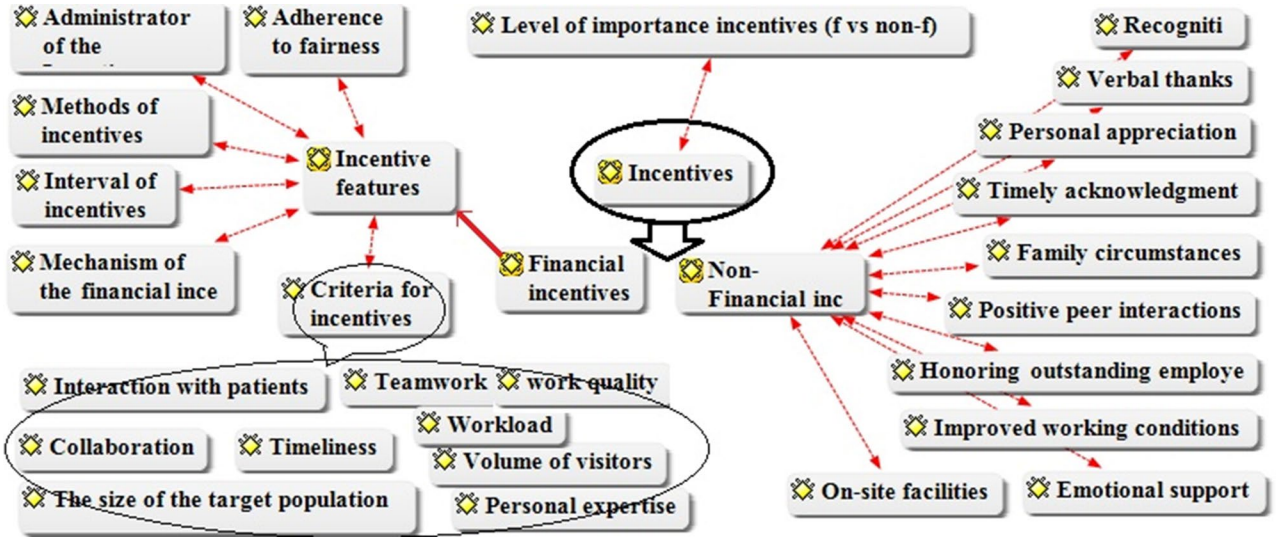

Fig. 2 Show the link between the central themes, sub-themes and many codes

standardization was undertaken, resulting in the identification of 238 initial codes. It is worth noting that the extracted codes were categorized into financial and non-financial incentives, and after eliminating duplicates, 155 codes were extracted in the financial incentives (Fig. 2).

Themes, codes, and quotations of participants

The results were systematically structured based on the conceptual and theoretical frameworks. Each code, theme, and sub-theme was explicitly aligned with corresponding elements within the frameworks, and the interrelationship between the two frameworks was demonstrated to elucidate their joint role in shaping the data structure. The Table 2 delineates the study results through themes and sub-themes, accompanied by their respective codes, thereby illustrating the conceptual and theoretical framework underpinning this research.

Importance of incentive levels (financial vs. non-financial)

An analysis of participants' perspectives explored that a significant majority rated financial incentives as extremely important on performance improvement. Others believed that the financial and non-financial factors were complementary. People's attitude towards work can also affect their level of motivation.

> *In my opinion, it is very important. Financial incentives are highly correlated with improved performance and outcomes. "CHW4"*
> *In my view, financial incentives, when combined with improved working conditions and the modernization of equipment and facilities, can complement each other. However, I believe that financial incentives are more effective than the other factors... "RIM 4"*
> *How well financial incentives work is complicated and depends on a lot of things. A person's attitude towards their job and whether they're motivated just by money or also by a sense of purpose makes a big difference in how effective those incentives are. Plus, the overall economy plays a huge role; when times are tough, money can be a much stronger motivator to improve performance. "RIM 1"*

Financial incentives

The Financial Theme, along with the subtheme of Incentive Features and their subcategories, is presented below, incorporating the perspectives of the research participants.

Incentive features

Mechanisms of the financial incentives

An analysis of the participant's viewpoint supported the idea of a fixed salary. Below are some key quotes from individuals regarding payment systems, where they emphasized the importance of factors such as fairness, inflation-adjusted salaries, overtime pay, wages during training, monthly bonuses, and the frequency of incentives addition to fixed salary.

> *Considering that CHWs have fixed salaries, incentives should be provided in the form of inflation-adjusted salary increases, fair overtime pay, and wages during training. "M1"*
> *I would prefer overtime pay, as salaries are being raised for all staff ... "RIM 1"*

Table 2 Overview of themes, sub-themes, and corresponding codes in the conceptual and theoretical framework of the study

Incentives			
Theme /subtheme	**Code /factor**	**Intrinsic/extrinsic**	**Herzberg-category**
Financial			
-Mechanism of the financial incentive	Inflation adjusted Salary / overtime pay, wages during training, monthly bonuses	Extrinsic	Hygiene factor
-Criteria for incentives: Quantitative and qualitative	Punctuality, timeliness, workload, interaction with patients, personal expertise, collaboration, teamwork, work quality, Record-keeping accuracy in the integrated health system (SIB), *target and active population*, The volume of visitors	Extrinsic → enhances intrinsic	Motivator
-Methods of incentives	Individual vs. team-based	Extrinsic	Hygiene factor
-Adherence to fairness	inadequate incentives, Absence of a standardized payment structure, lower rewards compared to other ministries, noticeable gap between payment levels and the inflation rate	Extrinsic → enhances intrinsic	Motivator
-Interval of incentives	Immediately, monthly, quarterly, small and continuous rewards	Extrinsic	Hygiene factor
-Administrator of the incentives	Head, instructor, peer,	Extrinsic	Hygiene factor
Non-financial	Working conditions	Extrinsic	Hygiene factor
	On-site facilities	Extrinsic	Hygiene factor
	Personal appreciation	Extrinsic → enhances intrinsic	Motivator
	Honoring outstanding	Extrinsic → enhances intrinsic	Motivator
	Verbal thanks	Extrinsic → enhances intrinsic	Motivator
	Timely acknowledgment	Extrinsic → enhances intrinsic	Motivator
	Family condition	Intrinsic	Hygiene factor
	Family support	Intrinsic	Hygiene factor
	Peer interaction	Mixed (mostly extrinsic)	Hygiene factor
	Recognition	Extrinsic → enhances intrinsic	Motivator
	Emotional support	Extrinsic → enhances intrinsic	Motivator
	People's attitude towards work	Intrinsic	Motivator
	Up-to-date equipment and technology	Extrinsic	Hygiene factor

CHW No. 6 stated, "*I believe that fair and monthly bonuses and overtime pay can significantly boost staff incentives…*" "CHW6"

Interval of incentives

An analysis of the perspectives of interviewees revealed that all managers and approximately half of the interviewees preferred quarterly payments. Due to most tasks were completed and could be reviewed by then. Some people also believed that to pay immediately after the completion of work. However, a substantial majority of Community Health Workers (CHWs) favored monthly payments.

> *It should be quarterly and paid after performance review every three months… "RIM 1"*
> *It would be much more appropriate to pay immediately after the completion of work. As the old saying goes, 'Pay the worker before their sweat dries.' "CHW11"*

Some research participants also believed that the *small and continuous rewards* are more effective than a larger incentive given over a longer period.

> *It is better to be smaller, but monthly is better. The individual receives the basic salary but is eligible for the overtime pay on a monthly basis… For maximum effectiveness, an incentive should be awarded shortly after the desired behavior is exhibited. However, if it is delayed by more than three months, it may lose its impact…….Although overtime pay for that good job or behavior might be given at the end of the season, the lack of immediate connection eliminates its impact. "RID1"*

Methods of incentive allocation

There were differing views on incentive methods. In total, a significant majority of the participants, comprising all managers and the majority of the CHWs groups, expressed the belief that teamwork could foster healthy competition. Whereas RIDs emphasized tailoring decisions to specific work conditions.

> *Each incentive model has its own set of advantages and disadvantages. However, given the specific indicators and performance metrics that can be extracted for each Home health, a team-based incentive model is preferable. "CHW14"*

Individual; because a positive competitive feeling is created. For example, I have worked hard to improve a program's indicator, while my colleague has been on vacation and they are not really a hard worker. In this case, encouraging both of us would only increase our disinclination to work… My colleague may become complacent, believing that even without working, nothing will happen to them because they have a colleague to cover for them. In fact, they are even rewarded, and I become demotivated… "CHW9"

Health home workers should be encouraged to adopt a team-oriented approach. Experience shows that an individual-focused mindset can lead to unhealthy competition. In a team-oriented environment, health workers collaborate to achieve the system's objectives. They cannot disregard the health home's goals simply because they have completed their own tasks. Additionally, if one worker notices a colleague excelling in improving a particular metric, they may feel less inclined to engage with the ongoing situation. "RIM 3"

Administrator of the incentives

Opinions varied. Furthermore, the majority of community health workers (behvarz) perceived that the health center manager and instructor ought to be involved in determining or distributing payments.

Each individual should receive incentives from one higher-order or, at most, two supervisors. If it exceeds this limit, the system will completely disrupt. For instance, in a health center, if a cleaning staff member has done a good job, the center manager should proceed with incentive for that individual, rather than higher-ups. This is to prevent any disruption to the chain of orders. "RID1"

Let the team decide on each member's contribution to the increase in the indicator, as neither the center manager nor the CHW trainer was directly involved in this matter. "CHW3"

Everyone, from the network manager to the CHW trainer and colleagues. "M2"

Criteria for incentives

Participants emphasized the inclusion of both quantitative and qualitative criteria in evaluations, noting that System SIB should not be the sole measure and that its limitations, along with aspects such as punctuality and patient interaction, should be considered.

Timely presence, punctuality, workload, and patient interaction. "M1"

I believe that, given the target and active population seeking services, payments should be based on measurable and quantifiable active population. "RIM 3"

I am quality-oriented… our system is generally quantitative, and our monitoring is currently quantity-based. Qualitative indicators require more rigorous monitoring. Quality is also a personal attribute, and individual preferences significantly influence it. We need to be able to scientifically define qualitative indicators. "RID1"

… However, it is inaccurate to compare activities within SIB system. Many activities, such as completing folder forms and boards, following up on external departmental and off-site activities, as well as health education and school activities, are not fully recorded in the SIB system. "CHW5"

High patient volume negatively impacts patient satisfaction and service quality by increasing wait times and staff workload, leading to delays and reduced accuracy.

The volume of visitors is also a critical factor because it directly influences work quality. For instance, if an individual waits in line for an hour, even if they receive the best possible service, they may still leave dissatisfied when going out of the office. This is not necessarily reflective of my performance, but rather of shortage of employees in this office and our manager's performance. "CHW14"

Adherence to fairness

Participants expressed differing views regarding the fairness of the payment system. While all managers considered the payments to be fair, a considerable portion of the total participants perceived them as unfair, including a notable proportion of community health workers.

Frequent viewpoints included insufficient attention to non-monetary rewards, inadequate incentives, and inconsistencies in the payment system, and misalignment between checklist scores and the incentives awarded.

Yes. "M1"

Currently, they only demand work, but no additional compensation is provided for the increased workload of CHWs. Although the workload has increased significantly in recent years, payments have remained relatively unchanged. It was better previously, with a smaller workload, lower inflation, and higher motivation. However, in recent years, the workload has increased, inflation has soared, and salaries have been reduced to half the minimum wage. "CHW12"

It is difficult to make a definitive judgment, as the rewards are not clearly defined. Whether the amount of the reward is commensurate with my work? Given the significant difference in salaries between healthcare workers and oil company employees, the rewards and incentives provided to each group also vary considerably… Compared to other organizations, these differences are substantial. However, within the organization itself, the distribution may be considered fair. "RID3"

Non-financial incentives

While the text mainly emphasizes the effectiveness of financial incentives, the analysis from participants' perspectives highlights the value of non-monetary approaches—such as personal appreciation, Verbal thanks, recognition, and other forms of appreciation and working conditions (Table 2). These methods can be particularly effective when tailored to the individual needs and preferences of the healthcare workforce.

…Monetary rewards are more common… In my opinion, non-monetary rewards are often overlooked… There are situations where money simply is not valuable; a day off, for instance, would be preferable. "RID1"

In my view, financial incentives, when combined with improved working conditions and the modernization of equipment and facilities, can complement each other. However, I believe that financial incentives are more effective than the other factors… "RIM 4"

….When someone does a good job, it is best to call him/her immediately to express your gratitude or to personally go and thank the person. This has a far greater impact than simply saying, 'I will give you overtime pay at the end of the month'.… "RID1"

Suggestions to improve the current situation

The extracted codes included performance-based overtime pay, adjusting payments based on the number of active and target population, considering the number of foreign patient visits, monitoring fake and inaccurate reports, considering the differences between rural and urban work, considering individual abilities and determining non-financial incentives, equipment and technology, improving work quality and conditions, compensating for the shortage of employees at least by utilizing contract-based employees, and optimizing the payment and evaluation system.

Discussion

The effectiveness of health systems significantly depends on a motivated workforce. Considering the crucial role healthcare workers, it is vital to adopt effective strategies that enhance their motivation [18].

The findings of the present study indicated that, from the perspective of most participants—particularly community health workers—the most influential factors affecting motivation and job performance were financial incentives. In this regard, The findings of the shakerian study further demonstrate that government employment and the receipt of a monthly salary serve as significant motivators for both entry into and retention within this profession [7].

Financial incentives and features

The findings indicated that the level of compensation is insufficient and does not yield the desired impact. Furthermore, the compensation levels do not align with the workload and inflation rates. In comparison with other ministries, it was perceived as unfair. While managers and some participants considered this categorization within the system to be fair, the majority perceived it as unjust. Using the "SIB" system (a platform where activities are recorded) for comparing individuals is also deemed inappropriate, as some external activities, such as training in schools, are not captured in the system. One of the significant issues raised is the quality of service delivery. Due to the predominance of quantitative criteria, there are instances where fabricated reports are submitted.

A comprehensive review of 68 articles investigating CHWs' financial incentives and the synthesis of data identified four key themes: The need for financial incentives, classifications of financial incentives, financing mechanisms for financial incentives, and planning considerations for effective implementation of financial incentives [10]. The establishment of effective payment mechanisms tailored to workload, responsibilities, and service area, as well as the necessity of a robust monitoring system, were highlighted as crucial payment requirements [2, 10, 11, 19]. Li H's study also highlighted that financial incentives, career progression were commonly cited subthemes with significant impact on primary care workers (PCWs) performance [20]. The findings of the present study align with all dimensions of the aforementioned reviews.

Findings of the present study showed that all managers and the majority of participants across groups favored team-based incentives. Most participants believed that an individual-focused mindset could foster unhealthy competition. In contrast, within a team-oriented environment, health workers collaborate effectively to achieve the system's objectives.

The study conducted by Endalamaw et al. identified weak teamwork, systemic inequities, and deficiencies in health information technology as significant barriers to effective service delivery [21]. These findings are consistent with those of the present study, which similarly underscores the impact of structural and technological limitations on healthcare performance. According to Aggarwal M, the findings emphasize the necessity of implementing alternative payment models beyond fee-for-service, combined with team-based pay-for-performance incentives, to enhance healthcare delivery and outcomes [22]. Grant C found that the Team-Based Goals and Incentives model fosters intrinsic motivation and enhances teamwork and performance among health workers [23].

However, our study showed that financial incentives, despite being classified as hygiene factors in Herzberg's model, played a more prominent role in stimulating motivation in the operational context under investigation. This finding may be attributed to specific economic conditions, income levels, or the healthcare workforce' perceptions of organizational justice. In such circumstances, financial incentives were perceived not only as tools to prevent dissatisfaction but also as active drivers of enhanced performance and motivation. Many studies have demonstrated that financial incentives are among the most significant factors influencing the motivation and performance of CHWs. When the healthcare workforce receive financial incentives, it can alleviate financial stress, allowing them to focus more on their work. Evidence also shows that financial incentives significantly motivate healthcare workers in low- and middle-income countries (LMICs), even when confined to local areas. Such incentives effectively enhance motivation and performance in resource-limited settings, where economic constraints restrict other motivational factors, making financial rewards essential for workforce retention and engagement [7–12].

Non-financial incentives

The non-financial incentives identified in the current research were also characterized by recurring and significant codes, including respect, emotional engagement, and prompt appreciation, outstanding employees, recognition. Some participants perceived financial and non-financial factors as complementary elements in fostering motivation and enhancing performance. In other words, these factors do not function independently, but rather synergistically within the motivational process. One key finding highlights the importance of emphasizing non-financial incentives in conjunction with a consideration of individuals' unique needs and contexts.

The study's findings indicated that, according to Herzberg's theory, these factors are primarily classified as motivators or intrinsic factors in nature. However, some extrinsic factors, such as timely recognition, verbal appreciation, and public acknowledgment, though external in delivery, can enhance intrinsic motivation by reinforcing the healthcare workforce' sense of competence and value. Additionally, elements like family support, although not directly related to the job, function as intrinsic hygiene factors that influence overall job satisfaction and performance indirectly.

The findings of this study regarding non-financial incentives affecting performance align with those of Colvin CJ, Scott K, Sang L, Aggarwal M, and Phanthunane, P, and Gaëlle Vareilles providing strong evidence that non-financial incentives can enhance the performance of CHWs and reduce burnout [12–14, 22, 24, 25].

Summary, studies have shown that the effectiveness of different types of incentives varies depending on working conditions in different communities [2, 8, 25–27]. Opportunities for professional development can enhance job satisfaction and career growth, leading to a more engaged and fulfilled employees. This, in turn, can reduce burnout and turnover rates, fostering a more stable and effective healthcare environment [13, 25].

The findings in certain instances revealed a divergence between the perspectives of managers and others participants. For example, in terms of fairness, managers advocated for equitable compensation within the system, whereas the majority of research participants did not concur with this viewpoint. This discrepancy seems to stem from limited resources, which subsequently affect the distribution and allocation within the system. Furthermore, factors at the levels of policy-making, program development, and organizational structure may also play a role. Issues arising from a misunderstanding of the prevailing conditions can often be resolved through strategies such as open dialogue and increased transparency [28].

Evidence indicates that incentives significantly influence motivation and satisfaction within the health workforce. These studies confirm that job satisfaction among healthcare workers directly impacts service quality, patient satisfaction and a decrease in medical errors [29–33]. The findings of the Poudel S study indicated that 76.3% of participants reported job satisfaction related to non-financial incentives [29]. Additionally, Ruth MG discovered that 80% of community health workers (CHWs) who did not receive monetary incentives had considered dropping out of their roles, compared to 66% of those who received financial incentives [30]. Yilmaz's research demonstrates that healthcare worker satisfaction accounts for 25.2% of patient satisfaction. These findings underscore the positive influence of healthcare worker satisfaction on patient satisfaction, thereby contributing to its overall enhancement [33].

Taken together, these results highlight the critical importance of designing integrated strategies that simultaneously address extrinsic and intrinsic incentives to enhance the satisfaction and effectiveness of the health workforce. Evidence suggests addressing the unique needs of communities is crucial for the effective design and implementation of these incentives [34].

Limitations

This study is based on the opinions, perspectives, and experiences of healthcare workforce who participated in the research process. Like all studies conducted based on personal experiences and individual opinions, there may be certain biases in understanding or interpretation, which could potentially influence the results. Another limitation of this research is that it is confined to a Tehran province, meaning the findings may not be fully generalizable to other regions. In summary, despite these limitations, the findings of this research can provide valuable insights for better understanding the challenges and opportunities in the subject area, especially in places with similar conditions.

Conclusion

The findings of the present study revealed that financial incentives, as one of the most influential extrinsic motivators, had a significant impact on individual motivation. Participants' perspectives revealed that, in addition to the high importance of financial incentives, payments must be fair and equitable. Compensation should be aligned with the level of activity and the roles of the healthcare workforce. This observation suggests a degree of flexibility in the boundaries between the two categories of Herzberg's theory, particularly in specific cultural and economic settings. Therefore, although financial incentives are theoretically categorized as hygiene factors, our empirical evidence indicates that in practice, they may serve a dual function. When appropriately designed—particularly in combination with opportunities for growth and performance recognition—these incentives can effectively contribute to enhancing motivation and performance.

Given the crucial role that CHWs play in healthcare service provision and health outcomes, recognizing the worth of their efforts and establishing appropriate incentive systems can contribute to enhancing service quality, job satisfaction, and public health. This requires policymakers and decision-makers to focus on crafting effective policies and making decisions tailored to the health workforce's incentives. The results of this study, derived from the views of the individuals involved, can offer useful guidance in developing impactful strategies. Additionally, efficient management and attention to the individual capabilities of CHWs can boost their worth and self-esteem.

Studies should be designed utilizing rigorous methods to assess the impact of these incentives on the improvement of community health indicators.

Abbreviations

CHWs Community health workers
SIB Integrated Health System

Supplementary Information

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Supplementary Material 1

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Author contributions

SS and M GH: Study design and conceptualization. M GH: Conducting and recording interviews and transcription. SS, M GH: reading, and re-reading the transcripts many times, and extracting the open primary codes, Reading in iterative method and extracting themes and check out the themes, and Naming the theme and manuscript writing and evaluation manuscript.

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Data availability

The dataset(s) supporting the conclusions of this article is (are) available from the corresponding author on reasonable request. The datasets generated and/or analyzed during the current study are not publicly available due [Given that the data was collected through interviews. Opinions and views of people are confidential].

Declarations

Ethics approval and consent to participate

This study is a qualitative research. The methods were performed in accordance with the Declaration of Helsinki, Shahid Beheshti University of Medical Sciences. It has been done in compliance with confidentiality and privacy and voluntary participation and withdrawal. Informed consent was obtained from participants verbally and in writing. This research was approved at the *Ethics Committee of the Shahid Beheshti University of* Medical Sciences (IRAN) with the ethical code: https://ethics.research.ac.ir/IR.SBMU.SME.REC.1402.087.

Consent for publication

Not applicable.

Competing interests

The authors declare no competing interests.

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