



Budget Policy and Revenue in Indonesian Community Healthcare Centers

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Abstract

The primary sources of revenue of community healthcare centers (CHCs, puskesmas) are capitation fees and public funds; only a minority are able to generate other revenues. Several factors contribute to this issue, chiefly ineffective management and inadequate budget policy. Consequently, CHCs provide poor quality of care, pushing patients away and lowering revenue. This study examined the effect of budget policy on the revenue of CHCs across Aceh, Indonesia. Quantitative data were collected from 375 managers in 102 inpatient CHCs in Aceh, Indonesia, using questionnaires, while qualitative data were gathered through interviews with 21 managers from 21 CHCs. Quantitative data were analyzed using linear regression, while qualitative data using thematic analysis. Budget policy was found to have a significant positive effect on revenue of inpatient CHCs, $B = 0.567$, $t = 5.776$, $p < 0.001$. The qualitative findings showed that CHCs were unable to generate sufficient revenue due to the convoluted process for imbursement of non-capitation fees, costs outweighing fees, gap between accreditation and practice, lack of entrepreneurial mindset, inadequate equipment and facilities, dependence on the Social Security Agency (BPJS), and insufficient human resources. These issues were driven in part by a non-participative budgeting process, rigid allocation and use of budget, and incoherent budget policy. Coherent budget policy at the policymaker and managerial levels is therefore necessary to promote revenue generation in inpatient CHCs. Budget policy must consider services, program, and activities that can satisfy the needs of society implemented by the management of CHCs. Patients and society should be involved in budget formulation and allocation (i.e., participatory budgeting). Internal budgets should be allocated by technocratic management and oriented towards revenue generation within the limits permitted by relevant regulations. Management must also become more entrepreneurial to “make do” with budget shortcomings and improve revenue.

INTRODUCTION

In the public healthcare system, quality of care, and accordingly revenue, is strongly associated with coherent budget policies (Ahmed et al., 2017; Ghia & Rambhad, 2023; Li et al., 2017; Sullivan, 2019). Public budgets should be

participatively decided and adequately allocated to healthcare providers to procure new resources while improving current ones, thereby improving quality of care. Institutional support and demonstration of power, whether episodic or managerial, are thus needed to improve quality of care,

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and accordingly revenue, especially at the primary level of care. This support and demonstration of power may manifest in various forms, among which is budget policy (Araújo et al., 2023). Yet budget policy in healthcare is a contentious arena, where budget-makers, political authorities, healthcare professionals, interest groups, and the public are engaged in incessant debates about budget (re)allocation and program funding. Each group is under different forms of pressure. In particular, budget-makers tend to employ the strategies of blame avoidance and timing to relieve those pressures (White, 2013). Moreover, misappropriate use of episodic power by elected politicians in the form of budget cuts and undermining of managerial power of healthcare professionals may likewise result in poor quality of care (Mutiganda, 2016). In Indonesia, primary healthcare facilities still largely rely on public funds and claims to sustain their operations. However, lengthy budget discussions at the national and local (i.e., provincial and regency) levels risk creating bottlenecks that delay activities, programs, and procurement (World Health Organization, 2017). Additionally, the difficult claim process—especially due to regional variations in terms of expertise, facilities, and supporting infrastructure (World Health Organization, 2017)—further exacerbate this issue. Furthermore, capitation and claims fees set by the Social Security Agency (BPJS) do not account for regional variations in prices. Additionally, they are too low given the required service standards and competency and do not account for total facility burden and performance (Agustina et al., 2019; Fanda et al., 2024; Putri et al., 2024). Consequently, primary healthcare providers typically “make-do” with what little budget allocated to them for their main operations, which risk lowering their service quality and in turn patient loyalty. Mardaleta et al. (2022) show that satisfactory quality of care—measured in terms of personnel expertise and empathy, service process, and the physical and social environment of CHCs—can positively contribute to the behavioral loyalty of patients. In other words, patients who are satisfied with the quality of care at their CHCs would be more likely to strictly follow the formal referral process. This ultimately means that inadequate healthcare quality could push patients away from primary healthcare centers to higher-tier public healthcare facilities through referrals or to the private healthcare system, further lowering the revenue of primary healthcare centers (Mardaleta et al., 2022; Wang et al., 2021).

The low revenue of primary healthcare centers is correlated with their service policy

(Hegji & Self, 2009), which in turn may be linked to incoherent budget policies, considering that improvements in quality of care require strong fiscal support and effective strategies (Asnawi & Johannes, 2007; Fatima et al., 2018). Revenue inconsistency is the consequence of weak budgeting policies and minimum economically valuable service activities (Dye & McGuire, 1991). Empirical evidence in developing economies suggest that the small revenue of inpatient primary care providers is linked to misaligned budget policies (Barroy et al., 2022; Maharani, 2015; Ogochukwu et al., 2021; Piatti-Fünfkirchen & Schneider, 2018). For example, Piatti-Fünfkirchen and Schneider (2018) show that in Tanzania and Zambia, the efficiency, equity, quality, and accountability of healthcare delivery are hindered by “stumbling blocks”—e.g., development of budgets with little concern for healthcare equity or quality—throughout the budget cycle (i.e., formulation, execution, and evaluation). Evidence from Indonesia shows that healthcare funding is similarly rather ineffective, resulting in discrepancies in quality of primary care. At the policy level, budget discussions are drawn-out and political, and actual disbursements of public funds are late (Agnes et al., 2025; World Health Organization, 2017). At the institutional level, CHCs have little autonomy on how to manage their budget and allocate for operational costs, and they lack the technical and technological resources on how to administer budget and submit claims (Ekawati & Claramita, 2021; Fanda et al., 2024; Health Research and Development Unit, 2019; Putri et al., 2024). As a result, CHCs have little budgetary flexibility to improve their services. Indeed, not all CHCs are able to provide care for all 144 medical conditions covered by the National Health Insurance (NHI) (Putri et al., 2024).

In Indonesia, the public healthcare system begins from primary care providers, i.e., community healthcare centers (CHCs) (*puskesmas: pusat kesehatan masyarakat*), to tertiary care providers (Ministry of National Development Planning, 2023). CHCs are generally accredited by a certified accreditation body (Regulation of the Minister of Health No. 42/2016). Their main sources of revenue are public funds, primary care services, and capitation and non-capitation fees (KOMPAK, 2017; Ministry of Health, 2023). CHCs receive fixed capitation fees from the Social Security Agency (*Badan Penyelenggara Jaminan Sosial*, BPJS), ranging from Rp3.600 to Rp9.000 per patient per month. The fee is determined according to five criteria: (1) human resources (number of doctors or ratio of doctors to enrolled

patients and number of dentists); (2) facilities and infrastructure; (3) scope of service; (4) service commitment; and (5) risk factor of patients. Non-capitation fees are generated from certain services specified by relevant regulations, e.g., ambulance, re-referral, antenatal care, prenatal care, and health screening services, among others (Ministry of Health, 2023). Capitation fees are transferred each month based on the number of enrolled patients, whereas non-capitation fees are transferred each month based on verified claims by the CHCs. Public primary healthcare providers may charge reasonable fees for rendered services to maintain high quality of care (Grönroos & Ojasalo, 2004; Mardiasmo, 2021). Theoretically, these fees should be charged below the full cost or subsidized to cover the costs of medical procedures provided (Bastian, 2019; Mardiasmo, 2021). They should also be set according to the principles of healthcare accounting (Grossi et al., 2020). In practice, however, capitation and non-capitation fees are determined in a top-down manner by BPJS and are uniform across Indonesia, with little consideration for variations in real market prices across geographical contexts (Putri et al., 2024; Satibi et al., 2019).

Most Indonesian CHCs rely on capitation fees and public funds as their revenue. This is true even for semi-corporatized CHCs (*Puskesmas Badan Layanan Umum Daerah*, BLUD). In 2019, based on comprehensive data from the Health Facility Research, more than 90% of non-corporatized and semi-corporatized CHCs are funded by capitation fees. For semi-corporatized CHCs, only 42.8% of the surveyed CHCs were financed from sources other than capitation and non-capitation fees. For non-corporatized CHCs, the figure was even lower: 7.2% (Health Research and Development Unit, 2019). These suggest that, firstly, CHCs do not, or are unable to, engage in revenue-generating services, perhaps because of complacency or ineffective management. Secondly, although CHCs can receive additional financing in the form of non-capitation fees (claims), the process is slow and bureaucratic. Common complaints are that the claims are not disbursed, late, or lower than the costs incurred (Health Research and Development Unit, 2019). Both capitation and non-capitation fees often do not cover the costs of the medical procedures undertaken (Ekawati & Claramita, 2021; Satibi et al., 2019). Because the claims process requires adequate resources and technical know-hows, CHCs with inadequate resources face difficulty in obtaining reimbursements (Agnes et al., 2025). Indeed, CHCs with lower accreditation status

tend to not even submit any claims, and those that do submit claims receive late or even no disbursements (Health Research and Development Unit, 2019). Thirdly, budget policy, as a form of support at both the policymaking and managerial levels, has been unable to promote the ability of CHCs to generate revenue from other sources. The upshot of this trend is the poor quality of care at the primary tier, pushing patients to attend hospitals for treatments that can be handled by CHCs, even though the Indonesian healthcare system has put in place strict procedures regarding the referral system. These patients “jump” to a higher-tier of care for several reasons, including congestion, inadequate healthcare facilities, and lack of doctors, nurses, and other resources at the primary tier of care (Francetic et al., 2020; Handayani et al., 2021; Yahya & Mohamed, 2018). In fact, some patients only attend CHCs to obtain (unnecessary) referrals to higher-tier healthcare facilities because of the perceived lack of quality at the primary care level (Ekawati et al., 2017; Handayani et al., 2021; Mulyanto et al., 2021). At the same time, some CHCs cannot provide care for the medical conditions covered by the NHI, necessitating referrals (Putri et al., 2024).

Prior research has suggested that effective budget policy is an important determinant of revenue for inpatient primary care centers (Chen & Fan, 2015; Fatima et al., 2018; Nyawira et al., 2022; Ogochukwu et al., 2021), but holistic studies on the subject are still minimum. Additionally, similar research in the context of Indonesia generally and Aceh specifically has been minimum. Inpatient CHCs were the focus because they have more opportunities to gain additional revenue as they can provide more healthcare services compared to outpatient CHCs. We fill these gaps by adopting three theories—organizational theory, resources-based view, and Blum’s theory—to generate evidence for the significance of budget policy on revenue generation. The theories explain how CHCs can exploit certain resources to provide quality healthcare services, thereby increasing their revenue. This study has important implications for budget- and policymakers and managers of CHCs, as it stresses how the misaligned interests of budget and policy makers could pacify the ability of CHCs to generate revenue, such that the CHCs are unable to operate in a sustainable manner.

We focus this study on CHCs in Aceh, Indonesia. Like their counterparts across Indonesia, CHCs in Aceh generally have small and inconsistent revenue, suggesting poor budget policy (Abdullah et al., 2012). Although the

implementation of the NHI has largely been beneficial for primary care financing, some issues remain. Among them is the sluggish, political nature of budget discourse, risking the effective provision of primary care (Agnes et al., 2025; Agustina et al., 2019; World Health Organization, 2017). Additionally, while CHCs receive multiple streams of income, their allocation for operations are inflexible and their differing accountability requirements create additional administrative workload on CHCs (Agnes et al., 2025; Ekawati & Claramita, 2021). Furthermore, the medical procedure costs set for non-capitation claims are top-down, even through real costs greatly vary by geography (Putri et al., 2024). Budget policy at the national level has also largely been centralized and does not account for regional variations, which may restrict the capabilities of CHCs in less developed regions (Fanda et al., 2024). It bears noting that budget policy here not only refers to the allocation of budgets to CHCs but also to their utilization. In most cases, the allocated budgets are left unspent by managers due to structural (e.g., regulatory constraints) or non-structural (e.g., managerial capabilities) factors (Maharani, 2015). This means that inefficient budget policies are present at both the policymaking and managerial levels. In fact, in Aceh, almost 60 percent of CHCs reported inadequate planning as the main cause for unused funds (Health Research and Development Unit, 2019). We thus examine the impact of budget policy towards revenue at CHCs in Aceh from the perspective of managers at those CHCs.

METHOD

Design

The study employed a concurrent quantitative-dominant mixed methods design (QUAN + qual) (Morse, 2016). In this design, the core component of the research is quantitative, while the qualitative component is supplementary. In this study, quantitative survey design was the core component of the study, where data were collected using questionnaires from the sample. At the same time, qualitative data were collected from the respondents to supplement the quantitative data.

Participants

This study employed quantitative survey design, focusing on inpatient CHCs in Aceh. The population was managers from 102 inpatient CHCs located in 14 regencies across Aceh. There are three levels of management at a CHC: top management, which is the Director of the

CHC; middle management, which is the Head of Administration; and first-line management, which is the head of each unit (e.g., pharmacy and laboratory). Following Hair et al. (2017), the required sample, calculated using G*Power, was 55 respondents ($f^2 = 0.15$, $\alpha = 0.05$, $\beta = 0.8$, predictor = 1). Stratified proportional random sampling was used to select the respondents. The first stratum was region, where 14 regencies were selected, representing the capital of Aceh and its southwest, eastern, and central regions. The second stratum was inpatient CHCs. Aceh has 137 inpatient CHCs in total. Slovin's formula was used to compute the number of required CHCs, which was 102. Based on these two levels of stratification, four managers were selected from each CHC: the director, head of administration, treasurer, and healthcare director (*usaha kesehatan perseorangan*, UKP).

The data collection procedure was as follows. First, data collection request letters were sent to Health Agencies in the 14 regencies (as CHCs are effectively the service providing institution of the Health Agency) and to 102 CHCs. Second, the researchers and appointed enumerators then came to each CHC to collect data directly from the respondents. Third, consent was gained from each respondent prior to data collection. Respondents were informed of the objectives and significance of the research. Respondents reserve the right to not participate in the research. Fourth, the respondents answered the questionnaire and returned it to the researchers and/or enumerators upon completion. The questionnaire was distributed directly to 408 purposively selected respondents from October 2020 to January 2021. The participants must either be (1) the director, (2) head of administration, (3) treasurer, or (4) healthcare director of a CHC. Thirty-three responses were unusable, leaving only 375 responses. Additionally, 21 managers from 21 different CHCs were interviewed during the survey to gain additional insights into why their CHCs are unable to generate sufficient revenue and how budget policy influences their revenue size and ability to generate revenue.

Instrument

The survey instrument comprised three sections: respondent profile, budget policy, and revenue. Budget policy was operationally defined as the appropriate allocation of participatively-decided budget, whose volume is determined by the provision of services in the form of necessary programs and activities (Achen & Bartels, 2017; Ellegård & Glenngård, 2019). It was measured

using 10 items subsumed under five dimensions and developed based on relevant literature and regulations (Atella et al., 2019; Bastian, 2019; Gross & Nirel, 1997; Mardiasmo, 2021; Republic of Indonesia, 2023b; Stadhouders et al., 2019): (1) appropriate budget allocation; (2) participatory budgeting; (3) budget sufficiency; (4) budget utilization; and (5) allocation priorities. Each dimension was measured using two items. The items were measured on a five-point Likert scale, from strongly disagree (1) to strongly agree (5). Sample items include “the budget allocated to my CHC meets the needs of patients, management, and institution”; “the budget at my CHC is formulated and proposed collectively, involving management and other internal stakeholders”; “the budget at my CHC covers all needs of the CHC, including its operations”; “more than one-third of the budget is used for administration and management of the CHC”; and “at my CHC, the budget is prioritized for public health programs (UKM) and individual health programs (UKP)”. The instrument was pre-tested on a subgroup of the population ($N = 20$) and found to be reliable ($\alpha = .760$). In the main study, the scale’s validity and reliability were established by estimating the factor loadings, Cronbach’s alpha (α), composite reliability (CR), and average variance extracted (AVE) on the collected data. Factor loadings (recommended = $>.5$) were computed to establish convergent validity, whereas Cronbach’s α (recommended = $>.6$) and item–total correlation (recommended = $>.3$) were used as measures of reliability (Nunnally & Bernstein, 1994). The construct was found to be valid and reliable, with item loadings >0.7 ; item–total correlations between .298–.604 ($p < 0.01$); and Cronbach’s $\alpha = 0.637$. The validity and reliability of the scale have also been established in a prior study of the first author (Mardaleta, 2022).

Revenue was operationally defined as fees generated from the provision of healthcare services (Smith & Bertozzi, 1996). Its measures were developed based on the literature (Hegji & Self, 2009; Mardiasmo, 2021). Revenue was measured with six items under three dimensions: (1) revenue from non-capitation or general patients; (2) contribution of each unit towards revenue; and (3) productivity of inpatient care. Each dimension was measured using two items. The items were measured on a five-point Likert scale, from strongly disagree (1) to strongly agree (5). Sample items include “the highest share of revenue at this CHC comes from non-capitation fees and/or general patients”; “every unit of service at this CHC contributes to its revenue”; and “this CHC

has a high bed utilization rate”. A pre-test of the scale showed it to be reliable ($\alpha = .774$). In the main study, the construct was found to be valid and reliable, with item loadings >0.5 ; item–total correlations between .424–.722 ($p < 0.01$); and Cronbach’s $\alpha = 0.622$. The scale’s validity and reliability have likewise been established in a prior study of the first author (Mardaleta, 2022). The research protocol was approved by the Management Doctorate Program Committee of Syiah Kuala University No. B/359/UN11.1.1/DIM/TD.06/2020.

Data Analysis

Linear regression was used to test the hypothesis. Prior to testing the hypothesis, classical assumptions of linear regression were first estimated using SPSS v25. These assumptions are linearity, normality of errors, independence, and homoscedasticity of errors. All regression assumptions were satisfied. The standardized residuals followed a normal distribution, with skewness and kurtosis values $<|2|$. The variance inflation factor (VIF) and tolerance value were respectively 1.375 (<10) and 0.727 (>0.1). An examination of the residuals scatterplot also showed the absence of heteroscedasticity.

Qualitative data were analyzed using Braun and Clarke’s (2006) thematic analysis procedure of data familiarization, initial coding, themes generation, evaluation of themes’ reliability and validity, naming and defining themes, and interpretation. Nvivo 12 was used to aid the analysis. Two main themes were generated from this exercise: inadequate budget policy (with three codes) and revenue (with seven codes).

RESULTS AND DISCUSSION

Quantitative Results

Table 1 details the demographics of the respondents. Most of the sample were married ($n = 349$, 93%) and Acehnese ($n = 345$, 92%). More than two-thirds were women ($n = 266$, 71%), while the most common age group was 30–54 ($n = 326$, 87%). Most of the respondents had attained tertiary education, both diploma ($n = 124$, 33%) and bachelor’s ($n = 225$, 60%). Finally, the managers were mostly civil servants ($n = 337$, 90%). Table 2 shows the descriptive statistics of the variables. The perception of the managers toward budget policy ($M = 3.48$, $SD = 3.16$) and revenue ($M = 3.25$, $SD = 3.58$) was generally between neutral and good. Some managers, however, had negative perceptions toward the budget policy practices ($min = 2.5$) and revenue ($min = 2.13$) at their CHCs. Bivariate

statistics (Pearson's r) showed that budget policy and revenue was positively and significantly correlated ($r = 0.5$, $p < 0.01$). The regression results are summarized in Table 3.

Table 1. Respondent demographics

Characteristic	n	%
Marital status		
Married	349	93
Unmarried	26	7
Ethnicity		
Acehnese	345	92
Non-Acehnese	30	8
Gender		
Male	109	29
Female	266	71
Age		
<18	0	0
18–29	34	9
30–54	326	87
>55	15	4
Education		
Secondary	7	2
Diploma	124	33
Bachelor's	225	60
Master's	19	5
Employment status		
Civil servant	337	90
Others	38	10

Table 2. Descriptive statistics

Variable	Min	Max	M	SE	SD
Budget policy	2.5	4.09	3.48	0.31	3.16
Revenue	2.16	4.88	3.25	0.35	3.58

Table 1 shows that budget policy had a direct positive influence on revenue, $B = 0.567$, $t = 5.776$, $p < 0.001$. This means that a unit increase in budget policy improves revenue by 0.567 units. As budget policy improves, the CHC's revenue increases. Contrarily, revenue would lower when budget policy is incoherent. The R^2 was 0.25, indicating that 25 percent of the variance in revenue was explained by budget policy. The remaining variance was explained by other variables not considered in this study.

Qualitative Results

Twenty-one managers (coded as M1–M21) from 21 CHCs were interviewed during the survey to gather supplemental information on why they are unable to generate sufficient revenue and how budget policy influences this issue. The main reasons for the CHCs' inability to generate revenue included convoluted process for imbursement of non-capitation fees, costs outweigh revenue, gap between accreditation and practice, lack of entrepreneurial mindset, inadequate equipment and facilities, dependence on BPJS, and insufficient human resources. Table 4 shows how the participants' quotes support the generated codes and themes.

Revenue

M9 explained that their CHC has an ambulance for which they can obtain non-capitation fees, but the cost of operating it outweighs the proceeds, as the ambulance is old and fees are set by BPJS or the local government, not the CHC:

"Yes, we have an ambulance, but the fees aren't sufficient because budget policy and fees aren't with the CHC but with BPJS and the local government. So, this causes the low revenue of the CHC because the operating costs are larger than the income received by the CHC. The ambulance is also old. We can't get a new ambulance be-

Table 3. Regression Results

Variables	Unstandardized coefficients		Standardized coefficients	t	p
	B	SE	β		
Constant	1.274	0.343		3.716	0.000
Budget policy	0.567	0.098	0.500	5.776	0.000
$R = 0.500$, $R^2 = 0.250$					

*Dependent variable: revenue

Table 4. Themes, codes, and supporting quotes

Theme	Code	Quote
Revenue	Complex imbursement process for non-capitation fees	"There are non-capitation fees, but the claim process is difficult, and so we don't make a lot of claims because there are many requirements to satisfy, sometimes irrational." (M8)
	Costs outweighing revenue	"...funds allocated from capitation fees, which cannot cover for the costs borne by the CHC, so quite often the CHC has to cover these costs from other sources, since capitation fees are set by BPJS, not the CHC." (M8) "So, this causes the low revenue of the CHC because the operating costs are larger than the income received by the CHC. The ambulance is also old." (M9)
	Gap between accreditation and practice	"Accreditation only measures the conformity between administration and service standards, without fully guaranteeing the quality of services provided to users." (M14) "It's just for compliance and changing our status and not accompanied by a change in mindset to increase revenue." (M21)
	Lack of entrepreneurial mindset	"The CHC's management does not have an entrepreneurial spirit." (M16) "...not accompanied by a change in mindset to increase revenue." (M21)
	Inadequate equipment and facilities	"We don't have adequate facilities because we don't have the budget to procure them and improve our services." (M6) "Even if we're located in a strategic location, we have adequate facilities and are unable to provide services that are pertinent to the specific medical cases of the region, affecting our revenue." (M16)
	Dependence on BPJS	"True, the number of patient visits to the CHC is high, but this doesn't mean its revenue would be high as well, because the patients are enrolled in the NHI, and so the CHC receives funds allocated from capitation fees..." (M8)
	Insufficient human resources	"...our personnel are limited in terms of type, skills, and responsibilities..." (M5) "...often the type of personnel [assigned to the CHC] isn't what we need..." (M12) "Most of the medical personnel aren't suitably skilled to handle the prevalent diseases in the region where they are assigned..." (M20)
	Budget policy	"We don't have the budget. It's difficult to get talents that are more suited to our needs because budget allocation and policy are in the hands of higher institutions." (M5) "We need a budget to procure new facilities, but the CHC cannot allocate the budget for purchasing new facilities." (M7) "...since capitation fees are set by BPJS, not the CHC." (M8)
		"The healthcare operations budget (BOK) allocated for field visits cannot be reallocated for other necessities like medical devices..." (M1) "The CHC does have a policy, but not budget policy, and even then it is not independent in setting its own policy, so it has to consult with its governing body since CHC is the technical implementation unit (UPTD) of the local Health Agency." (M15)
		Politically motivated "Support from the local parliament is mostly political. If there is any discussion on budget policy, it's always linked to their constituents and politically loaded, not purely for the desire to resolve healthcare problems..." (M18)

cause the decision is in the hands of the Health Agency or the local government." (M9)

M8 added that the procedure to imburse non-capitation fees is too convoluted and at times irrational, contributing to their low revenue. One

CHC receives lots of patients, though this does not translate into higher revenue, as capitation fees are set by BPJS. In fact, the costs of providing these services are higher than the capitation fees:

"True, the number of patient visits to the CHC is high, but this doesn't mean its revenue would be high as well, because the patients are enrolled in the NHI, and so the CHC receives funds allocated from capitation fees, which cannot cover for the costs borne by the CHC, so quite often the CHC has to cover these costs from other sources, since capitation fees are set by BPJS, not the CHC." (M8)

While CHCs can claim non-capitation fees to cover their costs, M8 claimed that the process is challenging to navigate, and so the CHC is unable to receive full reimbursement of their treatment costs:

"There are non-capitation fees, but the claim process is difficult, and so we don't make a lot of claims because there are many requirements to satisfy, sometimes irrational." (M8)

While these CHCs are accredited, it is mainly to comply with regulatory requirements with little influence on their process and revenue. M21, a manager in a semi-corporatized CHC, criticized that its transformation into a semi-corporation is merely "for compliance and changing our status and not accompanied by a change in mindset to increase revenue". M16 argued similarly, that management in their CHC are not entrepreneurial.

The CHCs also have inadequate equipment and facilities and human resources. Some of the CHCs' facilities are not up to standard, and they are unable to upgrade them due to the budget constraints (M6, M7, M16). M16 explained that despite their strategic location, the CHC does not "have adequate facilities and are unable to provide services that are pertinent to the specific medical cases of the region, affecting our revenue". M6, on the other hand, stated that their CHC does not "have adequate facilities because we don't have the budget to procure them and improve our services."

Finally, these CHCs lost revenue due to insufficient expertise. They are unable to employ additional specialists, nurses, and administrative employees. Their personnel are "limited in terms of type, skills, and responsibilities" (M5), which means that they are unable to provide services that may be needed by the local community or even have the proficiency to submit non-capitation claims. There is also a mismatch between experts appointed by the Health Agency and the locale's disease prevalence and burden:

"...often the type of personnel [assigned to the CHC] isn't what we need because the recruitment policy is not at the hands of the CHC..." (M12)

"Most of the medical personnel aren't suitably skilled to handle the prevalent diseases in the region where they are assigned... This isn't efficient and not what we need." (M20)

Budget Policy

With regards to budget policy, most respondents agreed that it was non-participative. CHCs do not participate in the discussion and allocation of their budgets (M2, M3, M5, M7, M8, M11, M15). Instead, this task is undertaken by the Health Agency above them. This leads to a mismatch between the actual needs of the CHCs and the allocated budget:

"Our CHC receives routine allocation from the local government, but its size is small compared to our operating costs, forcing us to find other sources of revenue to cover those costs. Ideally, the allocated budget should cover the costs of electricity, water, salaries, and so on, to fund the operations of the CHC to increase its revenue. However, this isn't possible because the CHC is the technical implementation unit (UPTD) of the Health Agency, and its budget has been determined by the Health Agency. In turn, the Health Agency's budget is determined by the Local Budgeting Team (TAPD), comprising the Local Development Board, Local Financial and Asset Management Agency (BPKAD), local secretariat, and other committees. The CHC is not involved in planning at the regency level because it is represented by the institution above it." (M3)

Additionally, the allocated budgets are fixed, which means that they cannot be used for purposes other than the stated ones. One CHC, for example, was unable to purchase equipment because the healthcare operations budget (BOK) could not be used to purchase equipment:

"The healthcare operations budget (BOK) allocated for field visits cannot be reallocated for other necessities like medical devices..." (M1)

M15 added that issues relating to budget must be consulted with the Health Agency. In this case, the CHC is not entirely dependent on its policies, including its own budgetary policy:

“The CHC does have a policy, but not budget policy, and even then it is not independent in setting its own policy, so it has to consult with its governing body since CHC is the technical implementation unit (UPTD) of the local Health Agency.” (M15)

The budgeting process is politically motivated, and any discussion related to budget policy is “always linked to their constituents and politically loaded, not purely for the desire to resolve healthcare problems” (M18). As a result, the policy is incoherent as it is intended to satisfy a group that is not directly affected by it. M17 added that the local government claims to support healthcare services, but it allocates little budget for training, process improvement, quality improvement, and so on:

“The government states its support to improve healthcare quality but doesn’t back this with appropriate budget policies, especially allocating for personnel training, designing standard operational procedures, quality improvement applications, and so on—things that aren’t necessarily visible.” (M17)

Discussion

The quantitative and qualitative results suggest that coherent budget policies in its cycle—formulation, execution, and evaluation—could enable CHCs to provide superior healthcare services to patients, whether those enrolled with the CHCs or otherwise, by maintaining and improving their tangible and intangible resources. Budget policy must thus consider services that can satisfy the needs of society in the form of programs and activities implemented by the management of CHCs (Republic of Indonesia, 2004a, 2023b). Patients specifically and society generally should be involved in budget formulation and allocation (i.e., participatory budgeting). Internally, budget should be allocated by a technocratic management and oriented towards revenue generation within the limits permitted by relevant regulations (Ministry of Interior, 2021; Republic of Indonesia, 2004a, 2023a).

The heart of the issue, however, is that budget policy coherence does not entirely rest in the hands of CHCs. CHCs merely provides services on behalf of the Local Health Agency; in fact, its budget policy is heavily influenced by decisions made by the local government budgeting team, local parliament, and BPJS (Republic of Indonesia, 2004b, 2009, 2015, 2023b). Therefore, besides the lack of managerial skills, CHCs

have little say in how budget policies are made; they are effectively “budget-takers”. They are also “price-takers” in the sense that they can only claim non-capitation fees to the amount that have been set by BPJS—regardless of market prices (e.g., urban vs. rural CHCs), capital, or other factors—without the involvement of CHCs. While CHCs’ interests are sometimes defended by the Local Development Board, Local Financial and Asset Management Agency (BPKAD), and local parliament, these are insufficient to produce a robust budget policy. The insignificant influence of CHCs, and therefore their inability to generate more revenue, is further limited when they are not semi-corporatized (BLUD). Regular CHCs are heavily restricted in how they receive, allocate, and spend their revenue, whereas BLUD are given more flexibility (Ministry of Health, 2016). Therefore, in line with Li and Elligers (2014), ineffective budget policy would ultimately lead to low, irregular revenue. As Dye and McGuire (1991) argued, the broader political context also influences revenue.

What little influence that CHCs have in terms of budget formulation and allocation, however, does not release their management from the responsibility to effectively allocate their internal budget and implement revenue-generating programs. Management of CHCs still must consistently design, implement, and evaluate policy products to ensure effective service delivery. Careful, effective planning and efficient service delivery can improve competitiveness and revenue (Ahmed et al., 2017; Meng et al., 2016). In other words, managers “make do” with any resources that they own and receive to carry socially and economically beneficial programs and activities. In a sense, as well, managers must be entrepreneurial.

The remaining variance in revenue can be explained by other variables. These may include management orientation to increase customers and thus revenue (Meesala & Paul, 2018). Efficiency-oriented budget policy and focus on cost control also have positive influence towards revenue (Atella et al., 2019). Other determinants of revenue include service policy and quality (Hegji & Self, 2009); innovation and creativity (Yuan et al., 2018); cost control (Gross & Nirel, 1997); and equity in healthcare services (Lewis, 2006). These factors can be explored in future studies.

This study is firstly limited by its sole focus on CHCs, but not other stakeholders that influence the revenue of CHCs, e.g., government agencies, legislative bodies, and society. Secondly,

other variables that determine revenue have not been examined. These may include, among others, innovation and creativity, managerial capability, and cost control. Finally, the sample was limited to CHCs in Aceh. Expanding the sample to the national level would enable more accurate generalizations and support better policymaking.

CONCLUSION

The study has shown that budget policy positively influences the revenue of CHCs in Aceh. Inpatient CHCs must routinely improve their budget policies and analyze more deeply the determinants of revenue. CHCs should also improve their quality of care to improve their revenue. This study can aid policy makers in designing regulations and strategies to improve revenue. The Local Development Board, BPKAD, Health Agency, local parliament, and local governments should allocate sufficient budget to CHCs, transform CHCs into semi-corporatized agencies, and appoint capable management. CHCs should be promoted to the local government unit (SKPD) so as to actively participate in budget formulation and allocation. In the current setup, they are merely service providers and therefore “budget-takers”. BPJS should likewise support CHCs to increase their revenue through appropriate regulations, including (1) those simplifying and expediting the claim process and (2) those setting non-capitation fees in line with the market rates in which the CHCs operate, which necessitates the involvement of related agencies and CHCs themselves.

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