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RESEARCH ARTICLE

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Setting up a patient complaint system in the national primary healthcare network in Lebanon (2016–2020): Lessons for Low- and Middle-Income Countries

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Abstract

Over the past decade there has been a renewed global commitment towards building people-centred healthcare systems and enhancing the capture of patient complaints. Literature from Low- and Middle-Income Countries (LMICs) on patient complaints is sparse. In 2016, the Primary Healthcare (PHC) Department at the Ministry of Public Health in Lebanon, developed a full grievance (complaint or inquiry) redress system. This paper aims to describe the development of the national grievance handling system and analyse 5 years' worth of grievance data (2016–2020). The study entailed a retrospective analysis of grievances relating to the care of patients treated in 237 Primary Health Centres in the national PHC network in Lebanon, lodged through the central grievance uptakes channels between 1 January 2016 and 31 December 2020. Between 1 January 2016 and 31 December 2020, the PHC Department at the ministry of health received 562 grievances from a total of 389 unique beneficiaries Management issues made up an overwhelming 70% of all grievances, followed by relationships (20%) and clinical issues (6%). Findings indicate the need to enhance the healthcare administration, monitoring and workflow at the PHC centres and to promote the utilisation of grievance systems. The study outlines lessons learned for building grievance systems in LMICs.

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KEYWORDS
complaint rate, grievance, healthcare quality, patient complaints, patient safety, primary healthcare

1 | INTRODUCTION

Over the past decade there has been a renewed global commitment towards building people-centred healthcare systems.[1] A key tenet of that is setting up robust governance and accountability systems which engage patients and seek their feedback.[1] Patient complaints structures are one of these systems that ensure that patient feedback is captured. In fact, information from patient complaints have been associated with both improved accountability, health service quality and overall health system performance.[2]

Although the literature has well documented interventions related to improving patient complaints, a recent systematic review has revealed crucial gaps in the literature.[2] These gaps include a limited understanding of the context of effective interventions within a complex healthcare system, and sparse evidence from Low- and Middle-Income Countries (LMICs).[2] Health systems in LMICs often have general policy frameworks and national bodies for complaints handling, but they struggle with operationalising and implementing these policies.[2] Anecdotal evidence has also implied that there is limited patient involvement in health care and a lack of integration of information from patient complaints, in service quality improvement in LMICs.[2] Healthcare systems in LMICs also suffer from inadequate funding and stock of drugs and supplies and an extensive reliance on the private sector where the public sector has failed.[3]

In Lebanon, and as part of a commitment towards quality improvement, accountability and transparency, the Ministry of Public Health (MOPH) set up a national complaint and inquiry hotline, becoming one of the first public institutions in the country to do so. In 2016, the Primary Healthcare (PHC) Department at the MOPH, with extremely limited resources, went a step further and developed a full grievance (complaint or inquiry) redress system, with protocols, documentation and swift corrective action. This paper aims to describe the development of the national grievance handling system for the PHC network in Lebanon. It also aims to analyse 5 years' worth of data (2016–2020) to determine the rate of grievances, their nature, their source, the profile of the grievants and the corrective actions undertaken, so that learnings can be made for other countries.

1.1 | Lebanese context

In Lebanon, laws and mechanisms governing complaints handling are generally traditional, outdated and offer limited access to the public. Public institutions are required to have a bureau where complaints can be submitted, in person at the relevant institution's headquarters and in writing. After which, the complaint is sent to the department that is most likely to be responsible for the resolution. This process could take weeks. In addition to the bureau, citizens could call the public institution's phone number and submit a complaint or inquiry, but this process remained undocumented, and haphazard, lacking streamlined protocol to follow. As for health facilities, both public and private, they had their own internal processes, as required by national accreditation standards to record and resolve complaints.[4,5] The resultant complaints and inquiries were not collated in a central warehouse and not made available to the MOPH for analysis or follow-up.

In 2015, and with the MOPH's push to embrace the digital world, automation, and citizen engagement, the MOPH took several steps to create uptake channels for citizens to submit complaints and inquiries. The MOPH created a form on their website to submit complaints and launched a mobile app with a feature to register complaints.[6] In addition, the MOPH acquired a four-digit hotline number and contracted a customer care agency to manage it coupled with complaints and inquiries pooled from the website and mobile application on a 24-h basis.[7] The hotline number

was not toll free as there was no legal infrastructure to support such a solution. The agency was responsible for responding to basic inquiries such as the nearest public hospital and for documenting complaints. The agency would then refer the complaints and complex inquiries to the relevant departments at the MOPH and provide a monthly report to the focal person at the ministry.

In 2016, the PHC Department at the MOPH with the collaboration of the World Bank took steps to build a streamlined grievance redress mechanism at the national PHC network. The PHC Department, with the support of a World Bank consultant, conducted a full situation assessment which found that despite the efforts already made by the MOPH, several gaps persisted; lack of follow-up on open complaint tickets, lack of awareness and low utilisation of the complaint uptake channels such as the hotline, absence of documentation of ticket opening, investigation and closure/measures taken, lack of oversight and analysis of complaints for patterns and systemic problems.[8] These gaps were attributed to several factors namely the lack of human resources dedicated to grievance redress, absence of guidelines and standard operating procedures for grievance and insufficient outreach or promotion for the grievance uptake channels.

2 | METHODOLOGY

2.1 | Intervention

The PHC department at the MOPH in Lebanon oversees the function of the PHC network which includes around 237 PHC centres owned either by non-governmental organisations, municipalities or governmental entities.[9] These Primary Health Centres (PHCCs) serve around 1 million beneficiaries annually including vulnerable Lebanese and Syrian refugee populations.[9] Since 2014, Lebanon's population has increased around 30% with an influx of 1.5 million Syrian refugees.[9] These refugees were dispersed into the community rather than set-up in camps and they access the same channels of healthcare as Lebanese including the PHC network for outpatient preventive and acute health services.[9]

The MOPH provides PHCCs in the national PHC network with in-kind contribution including vaccines, drugs, medical supplies, equipment and trainings while these PHCCs are expected to adhere to clinical guidelines and operating procedures and provide services at reduced rates which are paid out of pocket by patients unless covered by certain ad hoc programs.[9] As such when patients submit grievances related to the services, they receive at these PHCCs, they do so either through accessing the central channels which are the hotline, mobile application or website or by submitting a complaint orally or in writing at the PHCC.

In April 2016 and over the course of 2 years, the PHC Department at the MOPH set up a comprehensive grievance redress system to respond to complaints and inquiries received. Below is Table 1 that demonstrates the steps taken to set up the system, and Figure 1 which demonstrates the grievance handling process at the MOPH in Lebanon.

2.2 | Study design and population

The study entailed a retrospective analysis of grievances relating to the care of patients treated in 237 PHCCs in the national PHC network in Lebanon, lodged through the central grievance uptakes channels (hotline, website, mobile application, Facebook page, direct calls to MOPH, and patient satisfaction calls) between 1 January 2016 and 31 December 2020. The study did not include the grievances registered at the PHCCs since reporting from the facilities was still being rolled out and remained irregular and inconsistent with the MOPH databases. The MOPH defines grievances as the following: 'verbal or written issues, concerns, suggestions or problems about facilities or services provided by individuals or groups'.[10]

TABLE 1 Setting up the grievance handling system at the national primary healthcare network in Lebanon

Process improvement step	Aims	Description
1. Development of grievance handling procedures	To standardise grievance handling, documentation and analysis for grievances from different uptake channels	The PHC Department developed procedures for receiving, recording, investigating and closing the grievances that were received at the central level (hotline, website and mobile app). This included a (i) time limit for resolving regular and urgent grievances, (ii) follow-up with the grievant for ticket closure and (iii) process for investigations when necessary (example: the PHC is accused of fraudulent behaviour). These procedures were collated in the departmental operations manual, and a simplified flowchart of the grievance handling process is demonstrated in Figure 1. The procedures also ensured that the same process and grievance analysis was taken regardless of the source of the grievance (ticket opening, grievance classification, investigation, feedback to grievant and ticket closure). As for the grievances received at the level of the facilities (PHCCs), since the PHCCs were owned by different organisations that had their own management structures, the MOPH opted to support and standardise grievance handling at these PHCCs and gradually introduce reporting to the MOPH. As such the MOPH developed a standardised complaint and suggestions form which was then printed and distributed to the PHCCs. Procedures for handling oral and written complaints at the PHCC level were also developed including criteria for a visible and accessible complaints and suggestions box.
2. Development of classification and taxonomy for grievances	To standardise classification of grievances and adopt a contextualised taxonomy	The MOPH also adapted the taxonomy for the categories of patient grievances that was developed by Reader et al. for the context of the Lebanese outpatient primary healthcare setting. The grievance focal point was trained on the new categories, and the taxonomy became part of the day-to-day documentation of the grievances and was eventually embedded in the grievance management information system. One of the drawbacks of the taxonomy developed by Reader et al. is that the taxonomy does not account for complaints which have multiple issues. To mitigate this issue, the MOPH decided to split complaints that have multiple issues into several tickets, registered by the same person and at the same time. For example, if one complainant complained about both staff treatment and the bill, this would be counted as several tickets, and each classified separately. Despite this, some complaints still seemed to include several issues, so the protocol was to classify them according to the primary (most dominant) issue.

TABLE 1 (Continued)

Process improvement step	Aims	Description
3. Development of the grievance team	To ensure the timely follow-up and documentation of grievances through setting up a team	The MOPH designated a member of the staff as the grievance focal point at the PHC Department and added grievance handling responsibilities to the functions of existing MOPH primary healthcare field coordinators. These field coordinators were already assigned to oversee the work of PHCCs in different geographic regions. The grievance focal point was responsible for overseeing the status of all complaints received, their management and closure, resolving basic complaints and directing escalated complaints to the relevant PHC field coordinator based on the geographic location of the PHC in question. The grievance focal point was also in charge of all grievance-related training and for updating and maintaining the grievance database, in addition to reporting.
4. Capacity building	To train MOPH and PHCC staff on grievance handling	The MOPH conducted a slate of trainings for both MOPH and PHCC staff on grievance handling and conflict resolution. Trainings were usually paired with follow-up site visits to ensure adherence to protocols.
5. Promotion of MOPH hotline	To increase the utilisation of the MOPH hotline as a grievance channel by beneficiaries	A quick survey had shown that most of the patients accessing the PHC network were not aware of the MOPH hotline. As such to enhance the utilisation of the hotline, there was a push to promote it as the preferred method for submission of complaints. This was done through adding the hotline number to all MOPH and PHC communications, posters, pamphlets, campaigns and so on. In addition, a poster promoting the hotline was developed and distributed to all PHCCs in the network. PHC staff were also directed to tell patients coming in about the hotline.
6. Introduction of patient satisfaction calls	To illicit patient feedback, enhance grievance capture, and increase awareness about grievance uptake channels	As part of the quality monitoring at PHC, the MOPH PHC Department initiated quarterly rounds of patient satisfaction calls during the second half of 2016 to random patients that received services at PHCCs in the network. A section of the survey was about the patients' experience with the grievance mechanism and a chance for the surveyor to introduce patients to the hotline. An unexpected outcome of these calls was that the patients would submit complaints over the phone after being asked about their opinion of the services they received at the PHC.
7. Boosting the PHC Department Facebook page	To enhance patient access to information	During the COVID-19 pandemic, in 2020, the PHC Department decided to harness the power of social media to mitigate the wave of misinformation plaguing the country and boosted the Facebook page of department. As an unexpected result, the PHC Department began receiving inquiries and complaints via this platform which were then logged into the inquiries and complaints information management system.

(Continues)

TABLE 1 (Continued)

Process improvement step	Aims	Description
8. Regular reporting, monitoring and follow-up.	To ensure the adequate implementation of the grievance system, the timely and appropriate resolution of grievances and conduct corrective measures at the individual organisational and policy levels	The PHC Department embedded grievance monitoring into its daily, monthly and annual reporting. Monitoring and support field visits were conducted to the PHCCs to ensure compliance with grievance handling standards (documentation, accessibility of the complaint box, etc.). Key performance indicators for grievance were developed and tracked. Patterns were tracked, and corrective action was taken. For example, when a group of PHCCs were shown to receive recurring complaints relating to their communication with patients, an onsite communication coaching session was conducted at the PHC to mitigate this issue. The MOPH also developed its own grievance handling information management system to lodge and track all grievances. The system was designed to have two main kinds of users: (i) MOPH staff (to log grievances received centrally) and (ii) PHCC staff (to log grievances received at the facility). However, roll-out of the grievance module to the PHCCs was postponed due to the COVID-19 crisis. The grievance module is currently only used by MOPH staff.

Abbreviations: MOPH, Ministry of Public Health; PHC, Primary Healthcare; PHCC, Primary Health Centre.

2.3 | Statistical analysis

Study variables included total number of PHC services provided, number of grievances, source of grievance (hotline, website, mobile application, Facebook page, direct calls to MOPH, and patient satisfaction calls), severity of grievance (only life threatening conditions were classified as urgent and the rest as regular), type of grievance (complaint or inquiry or suggestion), category of grievance (Table 2) according to the taxonomy developed by Reader et al.[11] status of the grievance (open or closed), gender of grievant, person who filed the grievance (whether the patient filed it himself or a friend/family member), mode of resolution of grievance (apology, explanation, etc.), and time taken to resolve the grievance.

Descriptive statistics, namely, frequencies and percentages were computed for our categorical variables. Mean and standard deviation (±SD) were computed from our continuous variables. Data on number of PHC services provided were used as denominators in the calculation of grievance case rate. For subgroup comparisons, we calculated rate ratios with 95% confidence intervals and p-value set at <0.05. All the descriptive statistics and analyses were conducted on RStudio version 3.6.1.

2.4 | Ethical consideration

Required administrative authorisation to use the collected data for research was obtained from the concerned parties at the Lebanese MOPH. Data included in this study was collected as part of the MoPH's routine monitoring activities. The analysis was conducted on de-identified data, extracted from the grievance Information management System, and stored on password locked computers.

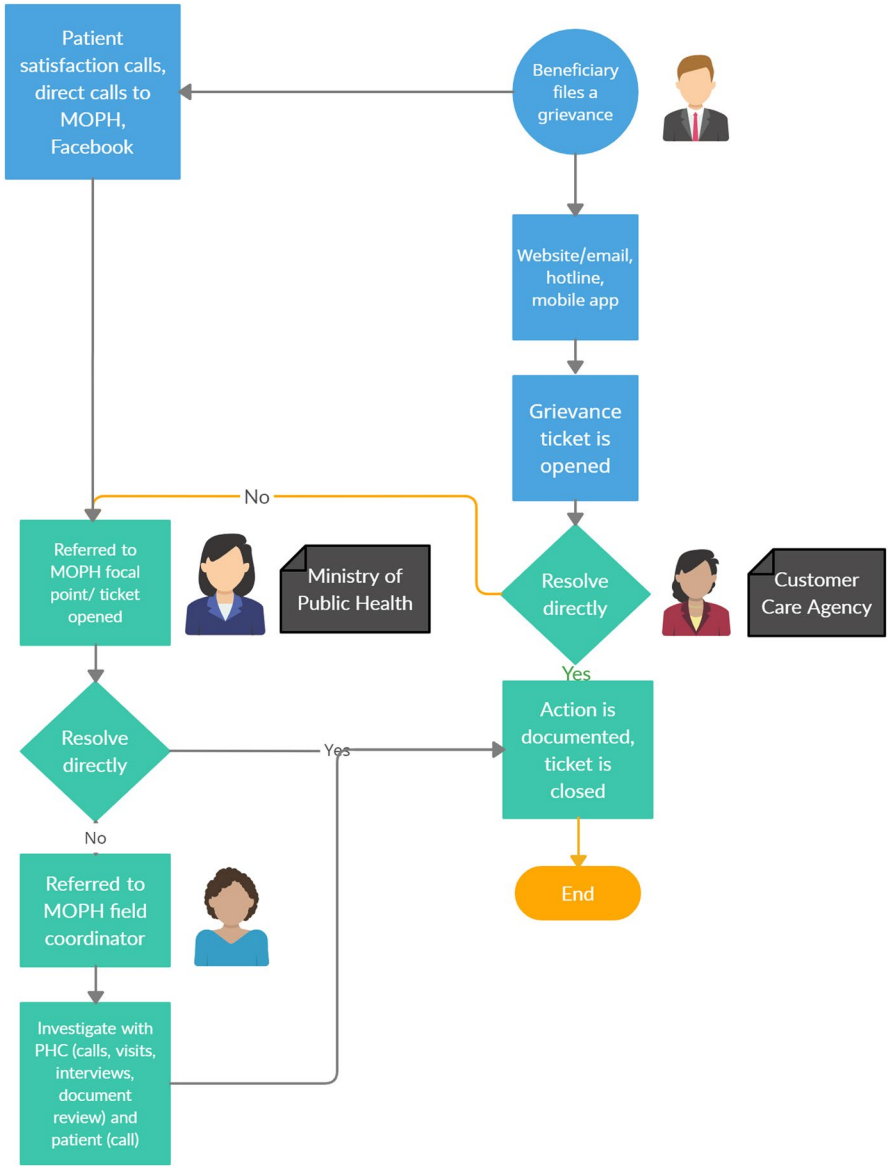

FIGURE 1 Grievance handling process at the Primary Healthcare Department at the Ministry of Public Health in Lebanon [Colour figure can be viewed at wileyonlinelibrary.com]

3 | RESULTS

3.1 | Outpatient visits and grievances

Between 1 January 2016 to 31 December 2020, the PHC Department at the ministry of health received 562 grievances from a total of 389 unique beneficiaries comprising an average of 1.44 grievances per grievant. Table 3 shows the description of the gender of grievants, relationship between grievant and beneficiary, types of grievances, and priority level. The number of males submitting grievances (300, 53%) is slightly larger than the number of females (258, 46%). Most of the grievances (356, 63%) were submitted by the beneficiary themselves, followed by children of the

TABLE 2 Taxonomy for categorisation of grievances in the Primary Healthcare Department at the Ministry of Public Health, Lebanon[a]

Domains	Categories	Sub-categories	Definitions
Clinical	Quality	Examinations	Inadequate patient examination by clinical staff
		Treatment	Poor or unsuccessful clinical treatment
	Safety	Errors in diagnosis	Erroneous, missed or slow clinical diagnosis
		Medication errors	Errors in prescribing or administering medications
		Safety incidents	Events or complications that threatened the safety of patients
		Skills and conduct	Deficiencies in the technical and non-technical skills of staff that compromise safety
Management	Institutional issues	Bureaucracy	Problems with administrative policies and procedures
		Environment	Poor accommodation or hygiene
		Finance and billing	Healthcare-associated costs or the billing process
		Staffing	Inadequate staffing
		Resources	Inadequate resources (medications, vaccines, medical equipment, etc.)
	Timing and access	Access	Lack of access to services or staff (distance, transportation availability of services/ appointments)
		Delays	Delays in access to treatment
		Referrals	Problems in being referred to a healthcare service
Relationships	Communication	Communication breakdown	Inadequate, delayed or absent communication with patients
		Incorrect information	Communication of wrong or conflicting information
		Patient-staff dialogue	Not listening to patients, lack of shared decision-making
	Humaneness	Staff attitudes	Poor attitudes towards patients or their families
	Patient rights	Abuse	Physical, sexual or emotional abuse of patients
		Confidentiality	Breaches of patient confidentiality
		Consent	Coercing or failing to obtain patient consent
		Discrimination	Discrimination against patients

[a]Adapted and contextualised by the Ministry of Public Health from: Reader TW, Gillespie A, Roberts J. Patient complaints in healthcare systems: a systematic review and coding taxonomy. *BMJ Qual Saf*. 2014;23(8):678-689.

beneficiaries (73, 13%) and the parents of the beneficiary (61, 11%). The grievances submitted were predominantly complaints (425, 76%) with 130 inquiries (23%) submitted, and seven feedback/suggestion grievances (1%). The grievances were predominantly of regular severity (548, 98%) and only 14 grievances were characterised as urgent (2%).

Table 4 shows the description of the number of grievances, grievance status, mean resolution time and case rate from 2016 to 2020. The number of grievances submitted, jumped dramatically from 2016 (9) to 2017 (126) then the increase was at a lower rate or the number of grievances submitted was stable. Overall, 97% of grievances were closed (544) and only 18 grievances remained open (3%). The mean resolution time for the grievances was 2.34 days and this included the time needed to investigate the grievance and close the loop (provide feedback) to the grievant. Overall, the grievance case rate was four per 100,000 services provided. The case rate is higher among men (5/100,000 services) than women (3/100,000 services), but the difference is not statistically significant ($p = 0.47$) (results are not shown in the table).

TABLE 3 Description of the gender of grievants, relationship between grievant and beneficiary, types of grievances and severity level 2016–2020

	N (%)
Gender of the grievants[a]	
Male	258 (46)
Female	300 (54)
Relationship between grievant and beneficiary	
Beneficiary him/her/themselves	356 (63)
Children	73 (13)
Parents	61 (11)
Spouse	22 (4)
Sibling	9 (2)
Other	17 (3)
Not identified	24 (4)
Types of grievances registered	
Complaint	425 (76)
Inquiry	130 (23)
Feedback/suggestion	7 (1)
Severity of grievances	
Regular	548 (98)
Urgent	14 (2)

[a]The number of males and female include duplicates of people who filed multiple grievances and are not unique patients.

TABLE 4 Description of number of grievances, grievance status, mean resolution time and case rate 2016–2020

Year	Number of grievances, *N*	Status of grievance, *N* (%)		Mean resolution time in days (±SD)	Total no. of PHC services provided[a]	Grievance case rate (per 100,0000 service)
		Closed	Open			
2016	9	9	0	1.11 ± 1.27	2,356,433	0.4
2017	126	123	3	2.77 ± 3.53	2,515,963	5
2018	145	142	3	3.29 ± 3.74	2,867,526	5
2019	117	111	6	2.29 ± 3.72	3,153,559	4
2020	165	159	6	1.61 ± 2.60	3,005,761	5
Total	562	544 (97)	18 (3)	2.34 ± 3.46	13,899,242	4

Abbreviations: MOPH, Ministry of Public Health; PHC, Primary Healthcare.

[a]PHC services are defined as any service delivered at the PHC which could include a consultation, nursing care, vaccination, diagnostic tests and many others. The same beneficiary could receive several services during the same visit.

3.2 | Grievance uptake channels

From 2016 to 2020, the majority of grievances were submitted through the patient satisfaction calls (44%) that the ministry conducted on a regular basis as part of its monitoring activities. This was followed by the hotline (35%), Facebook (14%), direct calls to the ministry (6%) and email/website (2%).

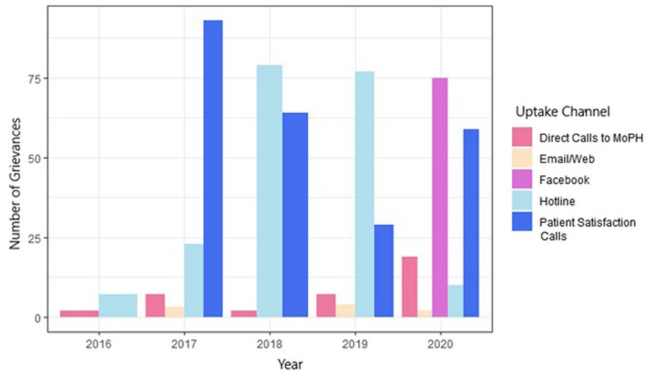

FIGURE 2 Grievance uptake channels utilisation per year 2016–2020 [Colour figure can be viewed at wileyonlinelibrary.com]

Figure 2 shows the grievance uptake channels utilisation by year. In 2016, the utilisation of the hotline was low, but still accounted for most of the grievances submitted. In 2017 the utilisation of the hotline increased progressively, peaking in 2018 and then decreased in 2020. In 2017, the uptake channel 'patient satisfaction calls' first appeared and accounted for the majority of the grievances for that year, then the number of grievances submitted through this channel decreased then shot back up in 2020. In 2020, the uptake channel 'Facebook' first appeared and immediately became the most utilised uptake channel for that year.

3.3 | Grievance classification

Management issues made up an overwhelming 70% of all grievances (n = 396; Table 5), with the leading subcategory being resources (158, 28%), followed by finance and billing (91, 16%), access (45, 8%), delays (38, 7%), referrals (26, 5%) and bureaucracy (24, 4%), with staffing and environment logging a combined 2% of all complaints (8, 1%, 6, 1%).

The second highest domain that the grievances were categorised under is relationships with 20% (n = 110) of grievances linked to it. The leading subcategory in the relationships domain is under humaneness and is staff attitudes (58, 10%). There were also issues related to communication (Communication breakdown [18, 3%], incorrect information [12, 2%], and patient staff dialogue [3, 0.5%]). As for patient rights, 3% of all grievances were subcategorised under discrimination (n = 17), while only one grievance was lodged regarding abuse (0.2%) and similarly for confidentiality (0.2%).

As for the clinical domain it only comprised 6% of all grievances (n = 32), with issues linked evenly between quality (14, 3%) and safety (18, 3%). As for subcategories, under quality, the grievances were split between examinations (8, 1%) and treatment (6, 1%). Whereas under safety, the most recurrent subcategory was skills and conduct (8, 1%), followed by error in diagnosis (5, 1%) and safety incidents (4, 0.7%), with only one grievance being lodged under medication error (1, 0.2%). 4% of all grievances were logged under 'other'.

3.4 | Measures taken to resolve grievances

A mean of 1 action per grievance was taken to resolve each complaint. The most common action taken to resolve the grievance was explanation (185, 34%), followed by the issuance of an official warning to the concerned PHCC by the ministry (79, 15%), and scheduling an appointment (67, 12%) (Table 6). No action was documented for 26% (n = 142) of all grievances.

TABLE 5 Grievance classification 2016–2020

Domains	Categories	Subcategories	*N* (%)[a,b]
Clinical 32 (6)	Quality 14 (3)	Examinations	8 (1)
		Treatment	6 (1)
	Safety 18 (3)	Skills and conduct	8 (1)
		Error in diagnosis	5 (1)
		Safety incidents	4 (0.7)
		Medication errors	1 (0.2)
Management 396 (70)	Institutional issues 287 (51)	Resources	158 (28)
		Finance and billing	91 (16)
		Bureaucracy	24 (4)
		Staffing	8 (1)
		Environment	6 (1)
	Timing and access 109 (20)	Access	45 (8)
		Delays	38 (7)
		Referrals	26 (5)
Relationships 110 (20)	Communication 33 (6)	Communication breakdown	18 (3)
		Incorrect information	12 (2)
		Patient–staff dialogue	3 (0.5)
	Humaneness 58 (10)	Staff attitudes	58 (10)
	Patient rights 19 (3)	Discrimination	17 (3)
		Abuse	1 (0.2)
		Confidentiality	1 (0.2)
		Consent	0 (0)
Other 24 (4)	Other 24 (4)	Other	24 (4)

[a]The percentages might not add up to 100% due to rounding up of decimal points.

[b]Percentage out of all registered grievances.

4 | DISCUSSION

A grievance is a verbal or written issue, concern, suggestion or problem about facilities or services provided by individuals or groups. In the present study, we investigated the proportion of services that were associated with written and electronic complaints, the type of complaints, their nature, the uptake channel used to file them, their mode of resolution, and the profile of the people who lodged them over a 5-year period.

4.1 | Reasons for complaints

An overwhelming majority (70%) of the complaints were classified under the management domain with the leading issues being resources, finance and billing, delays, access and bureaucracy (Table 5). This result is much higher than what was found in other studies. In the studies that followed the same taxonomy as ours, between 47% and 48% of complaints were related to management issues.[12,13] In studies that used a different categorisation, management

TABLE 6 Outcome measures for grievances 2016–2020

Outcome measure[a]	*N* (%)[b]
Explanation	185 (34)
Issuance of an official warning to the concerned PHCC by the ministry	79 (15)
Schedule appointment	67 (12)
Clarification of misunderstanding	40 (7)
Other	35 (6)
Referral to another provider or facility	27 (5)
Service delivery	25 (5)
Apology	21 (4)
Waiver, reduction or free refund	19 (4)
No action documented	142 (26)

Abbreviation: PHCC, Primary Health Centre.

[a]Not mutually exclusive; each grievance may have resulted in more than one action.

[b]Percentage out of closed grievances.

issues took an even more backseat[14–17] where clinical and communication issues were more dominant. The concentration of grievances in the management domain indicates major problems in administration of these clinics, their functioning and workflow. These results are in line with what we know about LMICs and their continuous struggles with funding, infrastructure, and operationalising policies.[2] These results also shed the light on some key issues but are only the first step, wherein further investigation is required to uncover underlying causes. For example, the most frequent complaint under the management domain was related to resources, particularly medication stockout. However, it is unclear what is causing the stockout (delays in purchasing or transportation, insufficient funding, incorrect supply chain forecasting, inadequate distribution of resources, etc.). In addition, the diversity of ownership of the PHC centres between non-governmental organisations, municipalities and governmental makes it exceedingly difficult to standardise protocols and procedures like fee schedules which is the second most frequent issue in the management domain (finance and billing). The MOPH should consider strengthening the administration of these healthcare centres further through different approaches, the most relevant of which is the proper implementation of the existing accreditation system. A robust accreditation system can also support standardising different procedures across clinics regardless of ownership.

As for the relationships domain, it comprised 20% of the complaints, which is much less than the studies that used a similar taxonomy that range between 41% and 42% of complaints.[12,13] In addition, communication, which falls under this category has been well documented to be one of the leading reasons for complaints.[14–19] In our study communication and staff attitudes were the major drivers of complaints in the relationships category. Other studies have recommended enhancing communication training and even integrating it into medical trainings.[14–16,20] An in depth look at PHC staff attitudes in Lebanon reveals that in many cases they are underpaid, overworked, and even have a high exposure to violence.[21–23] This is in line with evidence from other LMICs where PHC workers have to work in challenging and isolated environments.[24] Enhancing the incentive structure and workflow at the level of the healthcare workers in addition to providing training and mentoring would more likely yield the needed improvement in staff attitude.

As for the clinical domain, it comprised a meagre 6% of all complaints, a much lower proportion than in most other studies.[13–16,25,26] The low number of clinical complaints could be partially due to the low severity and urgency of the services delivered at the PHCs and the cases that present to the PHC. Furthermore, the asymmetry of information between providers and beneficiaries[27] in terms of diagnosis and treatment clinical guidelines could be another driver for the low number of grievances especially given the limited involvement of patients in decision making in LMICs.

Overall, our experience with using the taxonomy developed by Reader et al. was positive, as demonstrated by the fact that we were able to categorise 96% of all grievances under it. The taxonomy is both broad and comprehensive.

Unlike other studies, we did not conduct content analysis, but rather embedded this taxonomy in the day-to-day operational procedures of documenting and handling grievances. This made the routine data analysis easier and quicker, as the categories were already there. However, this proved challenging as the concepts in the taxonomy can be difficult for a staff member to master if they lacked a public health background. This was mitigated through capacity building, examples and having a reference person if the staff conducting the categorisation was unsure.

4.2 | Grievance capture and efficacy of grievance uptake channels

The complaint/grievance case rate found in our study (4 per 100,000 services or 0.04/1000) is extremely lower than what was reported in previous studies (Table 4). Other studies found the complaint case rate to range between 0.22 and 8 complaints per 1000 patients/services.[14–16,20,28] Overall, the low complaint rate is concerning and implies an underrepresentation of the true volume of complaints and gaps in the capture of patient complaints. There are multiple factors that could have led to this including the limited involvement of patients in decision making and care processes in most LMIC settings, weak trust in public systems and fear of consequences of reporting, and the global preference of patients to submit oral grievances rather than documented ones.[2] In fact, a survey conducted by the MOPH revealed that 42% of PHC beneficiaries preferred to talk to the manager of the PHCC as a means to submit a grievance and 28% didn't even know how to submit one, whereas only 30% opted for the formal documented methods.[29] As such, the MOPH should consider doubling down on efforts to elicit patient complaints, through increasing awareness of the existing grievance uptake channels (social media campaigns, television ads, etc.) and enhancing their accessibility through documenting patient oral grievances at point of service.

Regarding the gender of complainants, the proportion of males submitting grievances (300, 53%) is slightly larger than the number of females (258, 46%), and the case rate is higher among men (5/100,000 services) than women (3/100,000 services), but the difference is not statistically significant (p = 0.47). This means that overall, male, and female patients are equally likely to file a grievance. This could be due to the high proportions of females among both beneficiaries of primary care and the staff, which creates a female friendly environment.

Regarding the evolution of grievance capture over time, researchers have posited that a well-designed grievance redress mechanism is likely to increase the volume of complaints in the short-term, which would lead to enhancement in quality of services and eventually a reduction of complaint numbers in the long term[2,30] and this pattern seems to apply in our study as well. In 2016, at the very beginning of the intervention, the overall complaint volume was very low (Figure 2). In 2017, there was a huge jump in the volume of grievances coming primarily from a new uptake channel; patient satisfaction calls. The success of actively-solicited patient feedback[31] and context specific ways of eliciting information from users has been documented in several studies and shown to increase the overall amount of feedback received.[32] In addition to the influx of patient grievances from the patient satisfaction calls, the volume of grievances submitted through the hotline increased dramatically over 2017–2019 (Figure 2). This increase is most likely related to the promotional activities the MOPH implemented which aimed at enhancing the utilisation of the hotline (Table 1). However, the utilisation of the hotline dropped in 2020 likely due to the lower utilisation of services during the COVID-19 pandemic. In addition, upon the introduction of 'Facebook' as a grievance uptake channel in 2020, it became the most popular medium for submitting grievances in that year. Social media has been found to empower patients through providing support and complementing offline information.[33] Harnessing the access and reach social media provides can prove a powerful tool for stakeholders and public agencies.

4.3 | Limitations

The main limitation of the study is that the complaints analysed were drawn solely from MOPH central uptake channels and excluded all the complaints lodged at the PHC facilities. The complaints lodged at the facilities could have

added a wealth of data and analysis but reporting remained scarce and inconsistent. As such the complaints included here are an underrepresentation of the true complaints rates.

In addition, the study relied on data collected through the MOPH grievance system and several variables which could have added to the analysis are missing including the age of the complainants, educational level, and nationality. These variables started being collected in 2019.

Finally, even though extensive work had been done to clarify the different definitions of categories of complaints, they are often complex, and some may have been incorrectly categorised, leading to measurement bias.[14] Also, the results are subject to selection bias.[14] It is possible that some complaints that were submitted orally through calls were not officially logged in the system and that the data underrepresent the true complaint rates.

5 | CONCLUSION

Study findings indicate that the PHC Department at the MOPH in Lebanon was successful at setting up a comprehensive grievance redress mechanism with multiple uptake channels, which provides swift responsiveness and resolution, while maintaining meticulous documentation and categorisation of grievances and measures. The study found that the complaint rate at the primary care network in Lebanon is much lower than that found in other studies globally, and is likely to be a major underrepresentation of the true volume of grievances. The main issues reported in grievances were related to the management of the PHC centres (70%) which implies major problems in administration of these clinics, their functioning and workflow. Further investigation is required to uncover underlying causes. The MOPH might consider adopting a more stringent accreditation system to regulate and standardise the function of these PHCCs. The MOPH is also recommended to intensify efforts to elicit patient complaints, through increasing awareness of grievance uptakes channels and making it more accessible to patients through documenting their oral grievances at point of service.

Lebanon's experience with setting up this grievance system also carries several lessons and best practices for LMICs namely: (i) centralising the logging, classification and management of grievances, while decentralising the investigation process wherein regional staffers were tapped to weigh in and investigate complicated grievances which ensured a quick resolution time (less than 3 days), (ii) employing the standardised taxonomy for classifying grievances that was developed by Reader et al. after contextualising it and embedding grievance classification into the day-to-day operations and grievance handling to facilitate grievance content and trend analysis, (iii) utilising active patient engagement techniques such as patient satisfaction calls to enhance utilisation of uptake channels, (iv) promoting grievance uptake channels through various methods (online, at point of services, promotional material, etc.), (v) harnessing the power of social media and considering it a grievance uptake channel, (vi) including clinics and facilities in the grievance process and documenting grievances registered either formally or informally at these facilities and (vii) conducting periodic content and trend analysis for complaints and using the results to set priorities for action.

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CONFLICT OF INTEREST

The authors declare that they have no conflicts of interest. Authors Rawan Hammoud, Ola Kdouh and Randa Hamadeh have affiliations to the Ministry of Public Health.

ETHICS STATEMENT

Required administrative authorisation to use the collected data for research was obtained from the concerned parties at the Lebanese Ministry of Public Health. Data included in this study was collected as part of the Ministry of Public Health's routine monitoring activities. The analysis was conducted on de-identified data, extracted from the grievance Information management System and stored on password locked computers.

AUTHOR CONTRIBUTIONS

Rawan Hammoud conceptualised the study objectives and hypothesis. Rawan Hammoud and Sandy Laham developed the analysis plan, and Sandy Laham conducted the statistical analysis. Rawan Hammoud conducted the literature review. Rawan Hammoud, Randa Hamadeh, Ola Kdouh and Sandy Laham interpreted the data and drafted the study manuscript. All authors approved this version of the manuscript.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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REFERENCES

1. World Health Organization (WHO). Framework on integrated, people-centred health services. Report by the Secretariat. 2016. www.who.int/servicedeliverysafety/areas/people-centred-care/en/
2. Mirzoev T, Kane S. Key strategies to improve systems for managing patient complaints within health facilities – what can we learn from the existing literature? *Glob Health Action*. 2018;11(1):1458938.
3. Mills A. Health care systems in low-and middle-income countries. *N Engl J Med*. 2014;370(6):552-557.
4. MOPH Revised hospital accreditation standards in Lebanon – January 2019. 2019. https://www.moph.gov.lb/en/Pages/3/20553/accreditation-standards-for-hospitals-in-lebanon-january-2019
5. MOPH. Accreditation Of Primary Health Care Centers In Lebanon. 2021. https://www.moph.gov.lb/en/Pages/6/755/accreditation-primary-health-care-centers
6. MOPH. MOPH mobile application. 2015. https://www.moph.gov.lb/en/Pages/6/35863/moph-mobile-application-
7. MOPH. Ministry of health disseminates new procedure to follow up citizens' complaints. 2015. https://www.moph.gov.lb/en/Pages/13/1658/ministry-of-health-disseminates-new-procedure-to-follow-up-citizens-complaints-
8. Primary Healthcare Unit. *Rapid Assessment of Existing Grievance Redress System*. MOPH; 2015.
9. Hemadeh R, Hammoud R, Kdouh O. Lebanon's essential health care benefit package: a gateway for universal health coverage. *Int J Health Plan Manag*. 2019;34(4):e1921-e1936.
10. Primary Healthcare Unit. *Project Operations Manual: Emergency Primary Healthcare Restoration Project*. MOPH; 2018.
11. Reader TW, Gillespie A, Roberts J. Patient complaints in healthcare systems: a systematic review and coding taxonomy. *BMJ Qual Saf*. 2014;23(8):678-689.
12. Mack JW, Jacobson J, Frank D, et al. Evaluation of patient and family outpatient complaints as a strategy to prioritize efforts to improve cancer care delivery. *Jt Comm J Qual Patient Saf*. 2017;43(10):498-507.
13. Bouwman R, Bomhoff M, Robben P, Friele R. Classifying patients' complaints for regulatory purposes: a pilot study. *J Patient Saf*. 2021;17(3):e169-e176.
14. Zengin S, Al B, Yavuz E, et al. Analysis of complaints lodged by patients attending a university hospital: a 4-year analysis. *J Forensic Leg Med*. 2014;22:121-124.
15. Anderson K, Allan D, Finucane P. A 30-month study of patient complaints at a major Australian hospital. *J Qual Clin Pract*. 2001;21(4):109-111.
16. Taylor DM, Wolfe RS, Cameron PA. Analysis of complaints lodged by patients attending Victorian hospitals, 1997–2001. *Med J Aust*. 2004;181(1):31-35.
17. Mann CD, Howes JA, Buchanan A, Bowrey DJ. One-year audit of complaints made against a university hospital surgical department. *ANZ J Surg*. 2012;82(10):671-674.

18. Barragry RA, Varadkar LE, Hanlon DK, Bailey KF, O'Dowd TC, O'Shea BJ. An analytic observational study on complaints management in the general practice out of hours care setting: who complains, why, and what can we do about it? *BMC Fam Pract*. 2016;17(1):1-7.
19. Cowan J, Anthony S. Problems with complaint handling: expectations and outcomes. *Clin Gov Int J*. 2008;13(2):164-168.
20. Moghadam JM, Ibrahimipour H, Akbari AS, Farahbakhsh M, Khoshgoftar Z. Study of patient complaints reported over 30 months at a large heart centre in Tehran. *Qual Saf Health Care*. 2010;19(5):e28.
21. Dimassi H, Alameddine M, Mourad Y. A national study on nurses' exposure to occupational violence in Lebanon. *PLoS One*. 2015;10(9):e0137105.
22. Alameddine M, Saleh S, El-Jardali F, Dimassi H, Mourad Y. The retention of health human resources in primary health-care centers in Lebanon: a national survey. *BMC Health Serv Res*. 2012;12(1):1-11.
23. Dimassi H, El-Jardali F, Alameddine M, et al. A national study on nurses' retention in healthcare facilities in underserved areas in Lebanon. *Hum Resour Health*. 2013;11:49
24. Vasan A, Mabey DC, Chaudhri S, Brown Epstein HA, Lawn SD. Support and performance improvement for primary health care workers in low-and middle-income countries: a scoping review of intervention design and methods. *Health Pol Plann*. 2017;32(3):437-452.
25. Bismark MM, Brennan TA, Paterson RJ, Davis PB, Studdert DM. Relationship between complaints and quality of care in New Zealand: a descriptive analysis of complainants and non-complainants following adverse events. *BMJ Qual Saf*. 2006;15(1):17-22.
26. Kuosmanen L, Kaltiala-Heino R, Suominen S, et al. Patient complaints in Finland 2000–2004: a retrospective register study. *J Med Ethics*. 2008;34(11):788-792.
27. Wang Y, McKee M, Torbica A, Stuckler D. Systematic literature review on the spread of health-related misinformation on social media. *Soc Sci Med*. 2019;240:112552.
28. Siyambalapitiya S, Caunt J, Harrison N, White L, Weremczuk D, Fernando DJ. A 22 month study of patient complaints at a National Health Service hospital. *Int J Nurs Pract*. 2007;13(2):107-110.
29. Primary Healthcare Unit. *Emergency Primary Healthcare Restoration Project Annual Report, 2019*. MOPH; 2019.
30. Levin CM, Hopkins J. Creating a patient complaint capture and resolution process to incorporate best practices for patient-centered representation. *Jt Comm J Qual Patient Saf*. 2014;40(11):484-AP12.
31. Weingart SN, Pagovich O, Sands DZ, et al. What can hospitalized patients tell us about adverse events? Learning from patient-reported incidents. *J Gen Intern Med*. 2005;20(9):830-836.
32. King A, Daniels J, Lim J, Cochrane DD, Taylor A, Ansermino JM. Time to listen: a review of methods to solicit patient reports of adverse events. *BMJ Qual Saf*. 2010;19(2):148-157.
33. Smailhodzic E, Hooijsma W, Boonstra A, Langley DJ. Social media use in healthcare: a systematic review of effects on patients and on their relationship with healthcare professionals. *BMC Health Serv Res*. 2016;16(1):1-14.

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