Maternal Health Policy Priorities in Pakistan: A Content Analysis of Policy Documents

Pakeezah Sadaat
University of Toronto
Shahzadi Zain
University of Western Ontario: Western University
Bismah Jameel
McMaster University
Rida Shaikh
University of Toronto
Brittany Bowen
Brock University
Umair Majid (Umair.majid@mail.utoronto.ca)
University of Toronto https://orcid.org/0000-0002-4581-7714

Research

Keywords: policymaking, policy analysis, maternal health, priority-setting, Pakistan

Posted Date: November 25th, 2020

DOI: https://doi.org/10.21203/rs.3.rs-113318/v1

Abstract

Background: Despite numerous improvements in the health care system of Pakistan in the past few decades, many disparities continue to persist between health care policies and practices in comparison to developed nations, particularly in the area of maternal health. Despite a 181% increase in expenditure, Pakistan did not meet its target to reduce child mortality and improve maternal health by 2015, causing these disparities to further widen.

Methods: We sought to investigate the policymaking process of Pakistan by conducting a content analysis of 34 policy documents pertaining to maternal health service delivery.

Results: We found a number of gaps, priorities, and determinants for health policymaking. The most commonly discussed themes were the following: Measures of Burden, System and Organizational Capacity, Access and Availability of Health Services, Policy and Planning, Gaps and Needs, and Socioeconomic Factors. Integrated care and opioid use were seldom mentioned in included policy documents.

Conclusions: We discuss the reasons that might explain why Pakistan has not observed an improvement in maternal health outcomes despite significant investment. We use path dependency to explain that drawbacks of health care priority-setting processes in Pakistan. We suggest a refocus on identifying and improving health disparities between communities. We also suggest research and policy attention on integrated care and opioid use in Pakistan.

Introduction

Over the past several decades, Pakistan has made many efforts to improve in its healthcare system, however, there are many disparities between communities (e.g., between ethnicities and rural and urban communities) that reflect broader differences in health care policies and service delivery mechanisms [1]. The differences are particularly staggering when we compare Pakistan's healthcare system to other, low-resource countries [2]. A major challenge that exists is the delivery of high-quality healthcare. Thus, it is imperative to develop robust health policy frameworks that support effective and sustainable programs to minimize the risk of poor implementation [3]. Evidence has shown that there is a positive correlation between the effectiveness of policies and programs. Sound policies enable the implementation of sustainable programs. In fact, the influence of policies and frameworks on health care practice is a significant concern for governments. The impact of interventions and programs on mortality and morbidity indicators has been shown to be "variable and slow," despite investments in their development [4].

Delivery of high-quality maternal and child healthcare services in particular has been a subject of concern. Pakistan could not achieve its targets of Millennium Development Goal 4 and 5 (reduce child mortality and improve maternal health by 2015) despite an increase in expenditure by 181% during 2000–2010. In 2017, Pakistan's maternal and neonatal mortality ratios were documented at 140 per

100,000 live births and 46 per 1000 live births, respectively [5]. In 2017, Pakistan's maternal and neonatal mortality ratios were documented at 140 per 100,000 live births and 46 per 1000 live births, respectively [5]. Pakistan has the lowest maternal mortality ratio (MMR) in South Asia, however, the rate of decline of MMR is only 51% as compared to other South Asian countries such as Nepal (MMR: 186 per 100,000), India (MMR: 145 per 100,000) and Bangladesh (MMR: 173 per 100,000) who achieved a 66%, 61% and 60% decrease in MMR over the same period, respectively [5].While improvements can partially be attributed to a heavy investment in community outreach programs [6], a potential culprit of these high mortality ratios is the disconnect between evidence-based health policies and delivery of high-quality health care services. The failure to successfully implement promising healthcare interventions is a widespread phenomenon, not limited to low-resource countries. However, low-resource countries face additional challenges with regards to implementation, including "the weakness of their health systems, the lack of professional regulation and a lack of access to evidence" [7] A scoping review on the design and delivery of maternal health interventions in Pakistan found that various interventions have been developed and pilot tested, but few have been implemented and sustained in the long-term [7]. There remains a need for policy support for innovative interventions as well as the need for community buy-in and structural support to sustain practices. In addition, Zain and colleagues (2020) found that priorities for evaluating interventions along with strong policy support are necessary to ensure that interventions are implemented based on evidence [7].

Due to a disconnect between health policies and practice or implementation of programs, it is important to understand the nature of current priorities that exist within maternal health care delivery in Pakistan. Hence, our objective is to analyze existing policy documents pertaining to maternal health care in Pakistan. We will explore this by identifying gaps, improvements and determinants of policy formulation and decision-making in order to ensure alignment between policymaking and health care practice.

Materials And Methods

Approach

In this study, we conducted a systematic review and synthesis of policy documents. Policy documents not only provide systematic evidence for a policymaking process and inform decision-makers about various ethical and legal issues surrounding this process but also analyze the implications of a particular policy on health care practice. That is why the collection of a country's policy documents can provide valuable insight into the priorities of that country. While we do not emphasize the findings of any particular policy document in this paper, our examination of the collection of policy documents on maternal health and related concepts in Pakistan provides valuable information on the country's maternal health priorities, goals, assumptions, and philosophy.

We used a combination of quantitative and qualitative content analysis. Quantitative content analysis (QnCA) is a systematic methodology that classifies data retrieved from published texts by counting the frequency of certain words and phrases [8]. Unlike QnCA, qualitative content analysis (QlCA) transforms

text into categories and themes that represent similar meaning [9]. QICA is a “flexible method” for analyzing text data that specifically identifies the characteristics of language that serve as vehicles for communication, while also interrogating its contextual meaning [10, 11]. For this investigation, QnCA was used to categorize the descriptive characteristics of policy documents. This information helped to inform the priorities and most appropriate strategies for the QICA, which aimed to understand how key terminologies and concepts related to maternal health were framed in policy documents.

Search and Selection

We conducted a grey literature search to retrieve policy documents from organizations and agencies in Pakistan and other organizations that have conducted women’s health work in Pakistan (e.g., Research and Development Solutions, USAID, and the WHO). Two researchers developed a list of relevant organizations through an iterative handsearching approach. Four researchers conducted eight searches independently between January and April 2019. We then visited the websites of each organization and searched for key words (e.g., maternal, pregnant, woman, women, mother) to retrieve relevant policy documents. During this process, we also looked for other organizations identified on the websites as knowledge users or collaborators, and then we searched the websites of these organizations using the same approach. In addition, we searched the websites of professional associations (e.g., the Pakistan Medical Association), the World Health Organization repository, and Pakistan’s government agencies conducting women’s health work. We maintained an audit trail including information on the website and organization searched, the URL, date of search, details on what keywords were used to search, and the names of any policy documents found.

Policy documents in both English (the official language of Pakistan) and Urdu (the national language of Pakistan), available on the public domain, were eligible for inclusion. We did not place any restrictions on the year of publication because we aimed to visualize not only the current state of maternal health policy, but also how it evolved over time in Pakistan. The context of these policy documents was Pakistan; any policy documents specific to other nations were excluded. Restricting the eligibility based on country enabled us to improve the rigor of our analysis by focusing on how the context and nuances of policy within a specific nation might influence practice.

Data Extraction and Quantitative Content Analysis

First, we extracted the descriptive characteristics of policy documents including target users, developmental methods or methodology of the policy document, year of publication, publisher or author, and the type of organization. Information was also collected on the topic for each document such as medical condition, health service, policy objectives, or purposes or outcomes. Where mentioned, information was also collected on performance measurement indicators or metrics. We also retrieved information most relevant to maternal or women health from each document. We then performed descriptive statistics to categorize data on the above-mentioned characteristics to conduct the QnCA, which we have included in Additional File 1.

Qualitative Content Analysis

We used QICA to conceptualize how maternal health was framed in Pakistan's policy documents. This step involved identifying major themes and the meanings of words, concepts, and phrases used in policy documents on maternal health. We used the methods and techniques from latent content analysis, which is a set of guidelines that extracts the context and underlying meanings relevant to research questions [12].

Four researchers developed categories that captured the various dimensions of maternal health through inductive thematic analysis. In the first round of data analysis, we reviewed eight policy documents to understand the different ways documents use maternal health and related concepts. At the end of the first round, we developed a preliminary schema with 14 themes. In the next round, we tested the schema on the remaining policy documents. We followed the content analysis process by Downe-Wambolt (1992) – select a unit of analysis, create categories and parameters, pretest parameters, revise parameters as necessary, and assess the reliability and validity of categories when applying them to the larger dataset [8]. At the same time, we also utilized summative content analysis [12], which focuses on underlying meanings of words and is described as the most appropriate analytic framework for analyzing manuscripts or documents [12]. Summative content analysis helped us to not only evaluate the context around relevant words or phrases, but also comparing the usage of words in policy documents to the possible ways they can be used in the literature. At the end of this coding round, we were able to integrate several themes if they were often presented together in policy documents. The final framework included 12 themes that can be found in the Additional File. Since this framework was developed inductively from policy documents, the themes and their descriptions represent overall how maternal health related concepts were discussed in those documents.

Results

We retrieved 54 unique policy documents pertaining to Pakistan. We excluded one document because it was not specific to Pakistan. Upon screening the full text of the remaining 53 documents, we found that 16 (30.2%) did not discuss maternal health or related topics, which we excluded from our analyses. Excerpts were used as the unit analysis. We characterized excerpts as paragraphs of content that used maternal health or related concepts one or more times. Since each excerpt may use more than one relevant term, we attributed multiple codes to each excerpt. In total, we coded 352 excerpts with a total 541 codes in 34 policy documents. Our descriptive analysis including the date of publication, topics of documents, types of organizations, types of documents, and target users are included in the Additional File.

Framing of Maternal Health and Related Concepts in Policy Documents

Four of the 12 themes in table 1 comprised more than 10% of total codes each: Theme 1 Measures of Burden (n = 115; 21.3% of 541 codes), Theme 3 System and Organizational Capacity (n = 93; 17.2% of 541 codes), Theme 4 Access and Availability of Health Services (n = 76; 14.0% of 541 codes), and Theme 8 Policy and Planning (n = 75; 13.9% of 541 codes). Two themes comprised of between 5% and 10% of

total codes each: Theme 2 Gaps and Needs (n = 46; 8.5% of 541 codes) and Theme 11 Socioeconomic Factors (n = 42; 7.8% of 541 codes). Theme 12 (Drug Abuse, Overuse and Misuse) was only represented in one code in a policy document published by the Government of Sindh Health Department. The concept of integrated care was only coded five times in Theme 8 (Policy and Planning): three from community-based organizations and two from government bodies. For the purposes of this paper, we only describe the content of themes 1, 2, 3, 4, 8, and 11 in more detail because collectively they capture 83% of total codes. Table 1 provides a summary of the content of each theme.

Theme 1: Measures of Burden. We divided measures of burden into the following three domains: data about indicators on mortality and morbidity, empirical evidence on the lagging state of maternal health, and disparities between regions in Pakistan. Seven documents discussed the decrease in mortality ratios in mothers, infants, and children since 1990 [13–19]. Two documents discussed the rates of abortions and the number of lives that availability of safe abortion services puts at risk [13, 14]. Similarly, six documents demonstrated the many reasons behind health complications in mothers as well as infants [3, 15, 19, 20–22] including one document which examined the rate of immunizations in children to curb common diseases like measles [19]. Finally, utilization of family planning services was mentioned in two documents [23, 24].

The second domain focused on providing evidence that maternal health is lagging in Pakistan. Seven documents discussed the poor health infrastructure built around maternal and child health including inadequate staff training, lack of medical supplies and equipment, all of which contributes to a high proportion of reported morbidity and mortality in mothers and their infants [16, 17, 29, 22, 25–27]. Five documents discussed the consequences of low numbers of antenatal and postnatal visits common in the region as well as the limited obstetric care [16, 19, 20, 22, 27]. Four documents discussed the value and use of common contraception methods, such as sterilization and intra-uterine devices [28–31]. Considering the state of maternal health to be the worst in Asia (25), two documents promoted the idea of focusing on reproductive health facilities as well as birth spacing to reduce fertility and mortality rates in Pakistan [14, 32].

The last category pertains to the disparities that exist within the provinces of Pakistan. Five documents dissected the topic from rural vs. urban perspective in terms of maternal mortality ratios, abortion rates, and breastfeeding practices [15, 17, 26, 33]. Two documents explored Balochistan's healthcare system which lags behind on many maternal health indicators including maternal and child mortality ratios, antenatal care, malnutrition, contraception methods, and immunization [26, 34] in comparison to the other three provinces as examined in five other documents [3, 15, 31, 34, 33]. Two documents also discussed the role of public vs. private vs. non-profit models of health services delivery and their varying degrees of outreach in the country [29, 35].

Theme 3: System and Organizational Capacity. We categorized codes on system and organizational capacity according to the following: investment and improvement, technological and physical infrastructure, performance measurement and management, and strategies and interventions. First, 14

documents mention investment and improvement in the following formats: heavy investment by the government to improve maternal health [13, 18, 36], low investment by the government [3, 17], some improvement in maternal health because of investment (15; 28), and suboptimal improvement in maternal health despite significant investment [3, 13, 17, 18, 26, 30, 31, 37]. Two documents mentioned the United Nations Sustainable Development Goals in reference to investing resources to improve maternal health outcomes [15, 20]. Interestingly, two documents specified that investment leads to improvement in maternal health outcomes by reducing fertility rates in the population [26, 32].

Second, 16 documents cited technological and physical infrastructure of maternal health services. These mentions were commonly in the context of technology infrastructure or human resource capacity. Technology infrastructure mentions included supplies, equipment, and systems for centralized management [3, 17]. Documents also mentioned the need to reduce the duplication of services by increasing coordination between collaborating agencies, upgrading existing facilities, and establishing women friendly hospitals and referral systems [3, 34, 38]. Increasing coordination was an important topic in one document that mentioned a constant battle for “turf” between various government agencies (3), that in another document was due to improper allocation of government resources (18). Five documents identified the need for resources and capacity to provide maternal health services at all levels of the health system [3, 13, 14, 18, 24]. With regards to human resources, three documents recommended that increasing the quantity of healthcare providers did not increase service utilization by patients [17, 24, 30]. Other human resource issues included frequent staff transfers, understaffing, poor governance, staff absenteeism, scope of practice, and low reach of healthcare providers [3, 17, 19, 30, 35, 36].

Third, 12 documents mentioned codes related to performance measurement and management. Three documents described the methods to track maternal mortality ratios in different regions [15, 18, 22], whereas three documents mentioned the lack of data or systems to track maternal health indicators [3, 18, 19]. Three documents mentioned discrepancies between performance measurement indicators: reported vs. true vaccination status and utilization of family planning services [30, 36, 39].

Finally, six documents identified strategies or interventions to improve system and organizational capacity. Strategies in five of the six documents pertained to improving government commitment to increasing the availability of maternal health services through mandates, prioritization, and separation of maternal health issues from religious controversies [13, 14, 20, 40]. The remaining study discussed how non-governmental organizations can administer contraception to lower human resource burden on public health service organizations [30].

Theme 4: Access and Availability of Health Services. We divided the access and availability of health services into the following three domains: universal healthcare system, access to services, and affordability and costs of services. First, few documents discussed the need for a universal health coverage pertaining to women’s needs. Four documents did not explicitly mention university health care but discussed limited access to women and child health services [3, 13, 18, 34]. Furthermore, the 2010 health policy emphasized the need for universal health coverage, especially for reproductive health

services [18], two documents discussed the need for targeting the right audience to maximize utilization and making the healthcare system more responsive to women's needs [13, 20].

Second, studies stressed the need for greater access to basic services pertaining to women's and children's health. Nine documents stressed the need for greater access to skilled birth attendants, increasing public outreach of reproductive planning programs, and birth spacing programs. Of these nine documents, six discussed the need for greater access to skilled birth attendants even in geographically challenging areas as their availability in other areas decreased maternal mortality [17, 20, 22, 25, 38, 41]. Two documents suggested to increase the outreach of reproductive planning programs via public and private stakeholders [14, 31], whereas one document mentioned birth spacing for improving maternal and child health [13]. Family planning services were generally accessed when available to citizens [3, 28], but three documents asserted the need to increase their availability, which might reduce maternal mortality [19, 26, 29]. Four documents discussed some of the most common methods of family planning, which were barrier methods (e.g., condoms), sterilization, and intra-uterine contraceptive devices [28–31]. However, the availability of such services alone was not enough to reduce maternal mortality according to three documents and services need to be provided to all eligible women regardless of existing socioeconomic disparity to enhance survival [17, 33, 38]. One document discussed the varying audiences of the Ministry of Health and Ministry of Population Welfare, which served particular niches of eligible population [36].

Third, lack of a universal healthcare system suggested the need for affordable services. Two documents asserted that family planning services were mostly accessed through self- or co-payment mechanisms [28, 29]. Three documents discussed poverty as a factor leading to higher risk during pregnancy and childbirth with 1 in 4 women without any means to afford family planning [26, 29, 31]. Two documents discussed government's budget for family planning and its future intent on establishing new mother and child health centers [34, 36]. Interestingly, one document also discussed the need to employ women to make reproductive health care more affordable [14].

Theme 8: Policy and Planning. We categorized codes under policy and planning as follows: formal policies and policy vs. practice. In the first category, documents indicated a number of formal policies and their relation to the government's position on improving maternal health. Among the policies mentioned in documents included Policy 2010, the Anti-Women Practices Bill, Population Policy, the Women Protection Act, the Protection Against Harassment of Women at the Workplace Act, Domestic Violence (Prevention and Protection) Bill, the Reproductive Healthcare and Rights Bill, National Health Policy, and Pakistan National Policy for Development and Empowerment [14, 17, 19, 26, 34, 41]. Three documents stated that having formal policies conveys that the government prioritizes family planning, reproductive health, and women empowerment and education [3, 14, 26].

Documents also emphasized the relationship between policy and practice in the following formats: policies contribute to the successful implementation of programs [14, 33], policies contribute to achieving superior maternal health outcomes [14, 18, 19, 26, 34], programs are necessary for policies to have their

intended effects [14, 26, 32], and strategic frameworks informed by formal policies provide guidelines for community-based program implementation [17, 19]. On the other hand, three documents emphasized the need to review and evaluate existing programs, particularly how well family planning programs reach women [16, 28, 29].

Theme 2: Gaps and Needs. We divided the gaps and needs into the following four domains: unmet needs associated with affordability, accessibility, and availability of services, need for maternal health services and training programs, gaps between policy statements and practice, and call for action to improve the design and delivery of such services. First, five documents discussed the general state of unmet needs associated with affordability, accessibility, and availability of family planning services in Pakistan [28–31, 37]. Two documents discussed the need to involve non-governmental organizations to fill in the gap and scale up existing services [30, 31]. Another two documents posited that maternal and child mortality could be reduced by increasing the availability of contraceptives and other family planning methods as evidence suggests that those with limited access to family planning suffer the most [26, 42]. Two documents discussed the heavy financial investment in family planning since 1960s but with little gain [3, 18].

Second, three documents stressed the need to develop long-term voluntary family planning methods to address birth spacing [26, 37, 42]. Another three documents emphasized the need to strengthen the existing infrastructure by employing more midwives, providing comprehensive sexual care including pre- and post-natal care, and establishing nutrition programs [13, 19, 25] where one document identified similar strategies for the province of Balochistan [26]. Increasing the marketing of contraceptives was also discussed by two documents to enhance access [3, 33].

There are, however, several gaps between policy and practice when considering the delivery of maternal health services. One document identified several gaps including lack of an overarching maternal and child health framework, underestimation of nutritional status, and lack of 24-hour emergency obstetric care and referral systems, especially in rural areas [3]. Two other documents examined the poor implementation of policies leading to waste of resources [28, 30]. Surprisingly, gaps between policy and practice were only discussed in a handful of documents and only one document discussed the steps the government has taken to address this challenge [17].

Lastly, two documents addressed the steps that must be taken to improve the design and delivery of maternal health services. The document that identified gaps between policy and practice also detailed potential solutions including effective nutritional programs, emergency obstetric care, behavior changing interventions [3]. The second document called for producing highly effective campaigns, like that of polio vaccine, addressing maternal and child health issues [21].

Theme 11: Socioeconomic Factors. We divided mentions of socioeconomic factors into the following: economic opportunities (including education and employment), gender inequities, migration and urbanization, and religion and culture. First, 11 documents mentioned economic opportunities, six of which mentioned the relationship between adverse maternal health outcomes and the socioeconomic

status of women [17, 24, 26, 31, 34, 39]. Women who lived in poverty, had a more difficult time accessing family planning or other health services, even these documents explicitly recognized that this population benefitted the most from these services [17, 24, 26, 34]. With regards to sterilization, one document mentioned how women living in poverty were more likely to sterilize compared to wealthier women [31]. Four documents mentioned the need to create opportunities for women to contribute to the labor market [13, 14, 26, 43–45]. Creating policies that make family planning and other health services that control fertility may empower women by increasing their participation in the workforce. A key component of women empowerment was investing in interventions that increase health literacy which will lead to positive maternal health outcomes as indicated by five documents [14, 23, 25, 34, 39].

Second, six documents mentioned gender inequities in the form of social structures geared towards male dominance, eliminating systems that discriminate against women, and increasing the availability and accessibility of maternal health services [14, 17, 23–25, 43]. One document emphasized the need for research to clarify the socio-political realities of maternal health services, particularly intimate partner violence [17].

Surprisingly, only three documents mentioned religion and culture in reference to maternal health services [17, 31, 34]. These mentions were broad; there were no specifications of why or how religious or cultural values influence women's access to maternal health services. This was also the case for codes on migration and urbanization, which were only mentioned in two studies that described how women's mobility was limited [14, 17].

Discussion

In this review, we analyzed 34 policy documents pertaining to maternal health service delivery in Pakistan published by government agencies or other organizations in Pakistan. We developed 12 themes to represent the topics discussed in these documents: Measures of Burden; Gaps and Needs; System and Organizational Capacity; Access and Availability of Health Services; Engagement and Community Partnership; Collaboration with Health Service Organizations and Providers; Individual Rights to Health and Safety; Policy and Planning; Training Healthcare Providers and Researchers; Public Education and Awareness; Socioeconomic Factors; and Drug Abuse, Overuse, and Misuse. We found a number of gaps, improvements, and determinants for health policy formulation and decision-making. The most commonly discussed themes were: Measures of Burden, System and Organizational Capacity, Access and Availability of Health Services, Policy and Planning, Gaps and Needs, and Socioeconomic Factors, comprising over 80% of total codes.

Significant Investment but Suboptimal Improvement in Maternal Health

We found considerable redundancy and overlap in the ideas, concepts, and themes discussed in policy documents included in this content analysis. This finding may imply that governments and organizations who publish policy documents have used similar language to advance identical maternal health issues onto the regional and national health care priority agenda in Pakistan. This usage of similar language

may be a written manifestation of path dependency in current policy making activities in Pakistan. Path dependency reflects a situation where previously developed policies or priorities become self-reinforcing; the tendency for institutions to develop in very specific ways because of rigid structural properties, beliefs, and values [46]. Path dependency provides a structure of values and ideas that guide policy making process, particularly by providing a common language to promote socially complex agendas. Path dependency reduces the uncertainty during policy deliberations by providing an analytic framework to understand the ethical, economic, and social issues associated with a policy decision. It also reduces the need to invest time and resources in learning, coordinating, and anticipating the factors that may influence the policy decision [47].

We conjecture that while path dependency may have important benefits, in the case of Pakistan, it has caused significant and persistent investment in maternal health without desired improvement in the outcomes. In this review, we found eight documents that explicitly mentioned suboptimal improvement in maternal health indicators despite significant investment, which seem to indicate that Pakistani government agencies and organizations are concerned about their use of financial resources. This concern is important because there is some evidence showing that researchers and decision-makers may perceive improvement in overall maternal health indicators inaccurately. For example, some research has found that improvement in these indicators represents pre-existing health and socioeconomic disparities between populations. One study found that overall improvements in maternal health indicators in a region was indicative of improvements in women from higher socioeconomic status because they were more open to receiving knowledge and health care from community health workers, compared to women from the lowest wealth quintiles [48]. By analyzing these policy documents, we affirm that the overall improvements seen in the country, does not represent equitable changes to maternal health indicators. Path dependency, in the case of Pakistan, may have reinforced the need to communicate some improvement to communities and stakeholders, even if it is inequitably distributed to reflect health and socioeconomic disparities between communities. The lowest education and wealth quintiles may have the most to gain from improving maternal health policies and services. However, path dependency has limited the motivation to identify and plan for improving maternal health in all education and wealth quintiles, which we believe should be a major priority for Pakistan if sustainable maternal health improvement is pursued.

An important factor that may encourage path dependency in Pakistan is influence from external actors. Khan et al. (2012) found that the primary way for donors to influence priority-setting and implementation in Pakistan was the control of financial resources [49]. This is not new for Pakistan; previous research has found a significant influence of international agencies in other sectors such as transportation [50]. The control of resources reinforces a particular structure of values and ideas that guide future policy making activities, with the possibility of ignoring priorities – such as focusing on improving maternal health in the lowest wealth and education quintiles – that may better improve maternal health outcomes. Reorienting the health care priority agenda may require organized effort from external actors, including international agencies and organizations.

At the same time, no documents provided explicit or tangible solutions to the problem of suboptimal improvement despite significant investment. Future policy deliberations may consider developing strategies that optimize the impact of financial and non-financial investment on maternal health improvement. While path dependency emphasizes pre-existing priorities and policy approaches constraining future development in novel ways, Pakistani agencies and organizations might need to consider investing significant resources to learn from current efforts aimed at improving maternal health, and why they have failed to achieve the expected outcomes. Despite the considerable amount of conjecture, to our knowledge, there have been no robust investigations to determine the discrepancy between investment and expected improvement in maternal health services in Pakistan.

Health Priority Setting in Pakistan

There were two themes that were seldom discussed in included policy documents: drug abuse, misuse, and overuse, and integrated care. We discuss each of these themes below and identify implications for policymaking in Pakistan.

Drug Abuse, Misuse and Overuse. Of the 34 policy documents analyzed, only one document discussed drug abuse in women of childbearing age and a need for effective drug cessation programs. Our informal search on drug abuse in Pakistan led us to a historic first survey conducted in 2012 which confirmed that drug abuse varies by sex in Pakistan [51]. The document did not mention drug abuse among mothers or women of childbearing age in particular but confirmed low levels of drug abuse among women in general. However, in particular there was greater misuse of prescription opioids, tranquilizers, and sedatives in this population subset. While absence of evidence does not constitute evidence of absence, *Pakistan's Drug Abuse Control Master Plan 2010–2014* produced by the Ministry of Narcotics Control did not focus on women at length which may lead one to believe that the problem is not as prevalent among women as among men [52]. This also goes to show why there is little research on drug abuse in women in Pakistan and what dictates the agenda for research. It might be prudent for government agencies in Pakistan and other organizations to dedicate resources to identify whether drug abuse, misuse, or overuse is an issue in this population.

Integrated Care. One of the initial codes included in this analysis was 'integrated care' which was later included under the Health Policy and Planning theme. To provide integrated care, health services need to be managed and delivered in a continuum from health promotion to palliative care, coordinated across all different levels and sites of care [53]. In 2011, Pakistan's federal health ministry and other sectors were decentralized and transferred to the four provinces with the mandate of policy making, financing, regulation, service provision, administration and governance [54]. This meant that key maternal health programs managed by the federal health ministry were transferred to the provinces [54]. Recent review has shown that this transfer impeded progress and made the health system more vulnerable [55]. A major hindrance in the process was frequent changing of the leadership as well as interference by local political figures. Overall, key improvements in provincial planning led to optimal resource use but the implementation of such policies was suboptimal [55].

The five documents that mentioned integrated care were published during or after 2012. This makes sense from a policy perspective as the responsibility to provide adequate care in an integrated and coordinated manner, previously done by the federal ministry of health, now fell on to the provincial powers after devolution. This shows an attempt by policymakers to develop policies based on the concept of integrated care such that care can be managed in a seamless continuum. These documents emphasized the role of community healthcare workers to streamline the provision of health services as well as the role of provincial government in taking up the arduous task of repositioning family planning at the center of improving maternal health. Other policy documents discussed how to effectively introduce life-saving interventions during delivery and during pre- and post-natal care period. However, this was done from a needs-based perspective and documents failed to emphasize the role integrated care can play in improving coordination and management of care.

Limitations of this Analysis

There are a few limitations to our approach. First, we based our search strategy on grey literature search alone—a decision we have elaborated in an earlier publication [56]. While we were opened to including documents in both English and Urdu, we did not find any documents in Urdu nor did we conduct our search in Urdu which may have limited our scope. We found that official written correspondence in the country in the context of policymaking has been done in English but there is chance that documents published in Urdu were missed from our search. Second, performing a grey literature search also meant that relevant documents published in a reputable archive of policy documents may have been missed.

Declarations

Ethics Approval

Not applicable

Consent for Publication

Not applicable

Availability of Data and Materials

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

Competing Interests

Umair Majid receives financial support from the Canadian Institutes of Health Research and the Government of Ontario, Canada. Neither party was involved in the design and conduct of this research.

Funding

Not applicable

Author's Contributions

PS: Data extraction, analysis, and led the writing of the paper

SZ: Study conceptualization, searching and screening, data extraction, analysis, reviewing the paper

BJ: Study conceptualization, searching and screening, data extraction, reviewing the paper

RS: Study conceptualization, searching and screening, data extraction, analysis, reviewing the paper

BB: Searching and screening, data extraction, and reviewing the paper

UM: Supervising author – led study conceptualization, formulated searching and screening strategy, conducted data extraction, led analysis, and co-led writing of paper.

Acknowledgements

Not applicable

References

1. Qidwai W. Healthcare delivery system improvements: a way forward to improve health in developing countries and Pakistan. J Coll Physicians Surg Pak. 2013;23:313-4.
2. Pasha, O., Saleem, S., Ali, S., Goudar, S.S., Garces, A., Esamai, F., Patel, A., Chomba, E., Althabe, F., Moore, J.L., Harrison, M., Berrueta, M.B., Hambidge, K., Krebs, N.F., Hibberd, P.L., Carlo, W.A., Kodkany, B., Derman, R.J., Liechty, E.A., Koso-Thomas, M., McClure, E.M., Goldenberg, R.L. Maternal and newborn outcomes in Pakistan compared to other low and middle income countries in the Global Network's Maternal Newborn Health Registry: an active, community-based, pregnancy surveillance mechanism. Reprod Health. 2015; doi: 10.1186/1742-4755-12-S2-S15.
3. Siddiqi, S., Haq, I.U., Ghaffar, A., Akhtar, T., & Mahaini, R. Pakistan's maternal and child health policy: analysis, lessons and the way forward. Health Policy. 2004; 69:117-130.
4. Bhutta, Z.A. Maternal and Child Health in Pakistan: Challenges and Opportunities. Oxford University Press, USA; 2004. P. 272
5. Maternal mortality: Maternal mortality declined by 38 per cent between 2000 and 2017. 2019. https://data.unicef.org/topic/maternal-health/maternal-mortality/ Accessed 20 Feb 2020
6. Akseer N., Kamali M., Arifeen S.E., Malik A., Bhatti Z., Thacker N. Progress in maternal and child health: how has South Asia fared? BMJ. 2017; 11;j1608.
7. Zain S., Jameel B., Zahid M., Munir M., Kandasamy S., Majid U. The design and delivery of maternal health interventions in Pakistan: a scoping review. Health Care Women Int. 2020;9:1–29.
8. Downe-Wamboldt, B. Content analysis: method, applications, and issues. Health care for women international. 1992; 13:313-321.

9. Weber, R. P. Basic content analysis. 2nd Beverly Hills, CA: Sage; 1990.
10. Cavanagh, S. Content analysis: concepts, methods and applications. Nurse researcher. 1997;4:5-16.
11. McTavish, D. G., & Pirro, E. B. Contextual content analysis. Quality and quantity. 1990;24:245-265.
12. Hsieh, H. F., & Shannon, S. E. Three approaches to qualitative content analysis. Qualitative health research. 2005;15:1277-1288.
13. Asif, M., & Hyder, A. Contraception as women and child health intervention. Planning Commission, Government of Pakistan. 2018. Accessed 20 Feb 2020
14. Ministry of Population Welfare Islamabad. Pakistan Population Policy 2010. 2010. Accessed 20 Feb 2020
15. Punjab Healthcare Commission. The PHC Gazette. 2018. Accessed 20 Feb 2020
16. USAID: Research and Development Solutions. The community midwives program in Pakistan (Policy brief series No. 20). 2020. Accessed 20 Feb 2020
17. Golding, S., Hall, S., & Shah, F. Maternal and Newborn Health: The Policy Context in Pakistan. Research & Advocacy Fund, 1-11. 2011. Accessed 20 Feb 2020
18. Malik, M.A., Nahyoun, A.S., Rizvi, A., Bhatti, Z.A., & Bhutta, Z.A. Expenditure tracking and review of reproductive maternal, newborn and child health policy in Pakistan. Health policy and planning. 2017;32:781-790.
19. Ministry of Health: Government of Pakistan. Annual Plan 2015—2016. 1-189. 2015. Accessed 20 Feb 2020
20. Government of Pakistan. National Health Vision Pakistan (2016-2025). 2016. Accessed 20 Feb 2020
21. Punjab Healthcare Commission. The PHC Gazette (2018). 2018 Accessed 20 Feb 2020
22. USAID: Research and Development Solutions. Lessons from the international experience of community midwives (Policy brief series No. 19). 2012. Accessed 20 Feb 2020
23. USAID: Research and Development Solutions. Household predictions of immunization coverage in Pakistan (Policy brief series No. 14). 2012. Accessed 20 Feb 2020
24. USAID: Research and Development Solutions. What unmet need for family planning means in Pakistan (Policy brief series No. 6). 2012. Accessed 20 Feb 2020
25. Abbasi, S.H., Kazi, G.N., Mughal, M.J. Health policy for the province of Sindh: Paving the way for healthcare sector reform (Report No. SO (TECH-I) 11-16/2005). Health Department, Government of Sindh. 2005. Accessed 20 Feb 2020
26. Sathar, Z.A., Sadiq, M., Ashfaq, S. Reducing maternal and child mortality in Punjab: The untapped potential of family planning. Islamabad, Pakistan: Population Council, Evidence Project. 2015. Accessed 20 Feb 2020
27. Ministry of Health: National MNCH Program. Pakistan's maternal and child health policy and strategic framework (2005—2015). 2005;1-22. Accessed 20 Feb 2020
28. USAID: Research and Development Solutions. Family planning in Pakistan: An overview (Policy brief series No. 1). 2012. Accessed 20 Feb 2020

29. USAID: Research and Development Solutions. Family planning services in Pakistan (Policy brief series No. 2). 2012. Accessed 20 Feb 2020
30. USAID: Research and Development Solutions. Family planning service delivery and its uptake in Pakistan (Policy brief series No. 13). 2012. Accessed 20 Feb 2020
31. USAID: Research and Development Solutions. Understanding female sterilization in Pakistan (Policy brief series No. 7). 2012. Accessed 20 Feb 2020
32. National Institute of Population Studies. Population growth and reproductive health. N.d. Accessed 20 Feb 2020
33. Government of Khyber Pakhtunkhwa. Khyber Pakhtunkhwa health sector strategy 2010—2017. 2010;1-92. Accessed 20 Feb 2020
34. Planning and Development Department, Government of Balochistan. Balochistan comprehensive development strategy. N.d.;1-157. Accessed 20 Feb 2020
35. USAID: Research and Development Solutions. Service provision and private sector family planning models in Pakistan (Policy brief series No. 12). 2012. Accessed 20 Feb 2020
36. USAID: Research and Development Solutions. Utilization and costs of family planning in the public sector in Pakistan (Policy brief series No. 4). 2012. Accessed 20 Feb 2020
37. USAID: Research and Development Solutions. The contribution of lady health workers towards family planning in Pakistan (Policy brief series No. 15). 2012. Accessed 20 Feb 2020
38. Ministry of Health: Government of Pakistan. National Health Policy 2001: The Way Forward. 2001;1-19. Accessed 20 Feb 2020
39. USAID: Research and Development Solutions. Impact of infrastructure on immunization coverage (Policy brief series No. 11). 2012. Accessed 20 Feb 2020
40. USAID: Research and Development Solutions. What can Pakistan learn from Iran, Bangladesh and India on family planning programs (Policy brief series No. 8). 2012. Accessed 20 Feb 2020
41. Ministry of Health: Government of Pakistan. National health policy draft 2009. 2009; 1-18. Accessed 20 Feb 2020
42. USAID: Research and Development Solutions. Family planning: Pakistan's need of today and tomorrow (Policy brief series No. 5). 2012. Accessed 20 Feb 2020
43. USAID: Research and Development Solutions. Can Pakistan reap its demographic dividend? (Policy brief series No. 16). 2012. Accessed 20 Feb 2020
44. USAID: Research and Development Solutions. Childhood immunization: For a healthy Pakistan today and a prosperous Pakistan tomorrow (Policy brief series No. 17). 2012. Accessed 20 Feb 2020
45. USAID: Research and Development Solutions. Childhood immunization in Pakistan (Policy brief series No. 3). 2012. Accessed 20 Feb 2020
46. Pierson, P. Increasing Returns, Path Dependence, and the Study of Politics. American Political Science Review. 2000;251–267.

47. Bonoli, G., Palier, B. How do welfare states change? Institutions and their impact on the politics of welfare state reform. European Review. 2000;8:333–52.
48. Abbott, L., & Luke, N. Local hierarchies and distributor (non) compliance: a case study of community-based distribution in rural north India.Health care for women international. 2011;32: 225-242.
49. Khan, M. S., Meghani, A., Liverani, M., Roychowdhury, I., & Parkhurst, J. How do external donors influence national health policy processes? Experiences of domestic policy actors in Cambodia and Pakistan. Health policy and planning 2018;33:215-223.
50. Imran, M., & Low, N. Institutional, technical and discursive path dependence in transport planning in Pakistan. International Development Planning Review. 2007;29:319.
51. United Nationals Office on Drugs and Crime & Ministry of Interior and Narcotics Control, Government of Pakistan. Drug use in Pakistan. 2011. https://www.unodc.org/documents/pakistan/Survey_Report_Final_2013.pdf Accessed 15 July 2020
52. Ministry of Narcotics Control, Government of Pakistan. Drug Abuse Control Master Plan, 2010-2014. 2010. https://www.aidsdatahub.org/sites/default/files/resource/pakistan-drug-abuse-control-master-plan-2010-14.pdf Accessed 15 July 2020
53. Contandriapoulos A.P., Denis J.L., Touati N., Rodriguez C. The integration of health care: dimensions and implementation. Montréal: Université de Montréal. Groupe de recherche interdisciplinaire en santé. Working Paper. 2003;N04–01.
54. Mazhar, A., & Shaikh, B. T. Reforms in Pakistan: decisive times for improving maternal and child health. Healthcare policy. 2003;8:24–32.
55. Zaidi, S. A., Bigdeli, M., Langlois, E. V., Riaz, A., Orr, D. W., Idrees, N., & Bump, J. B. Health systems changes after decentralisation: progress, challenges and dynamics in Pakistan. BMJ global health. 2019;https://doi.org/10.1136/bmjgh-2018-001013
56. Majid, U., Zain, S., Shaikh, R., & Jameel, B. Uncommon methodologies for conducting literature reviews: Part 1—a policy analysis of how maternal health concepts have been framed in policy documents of a low-income country. SAGE Research Methods Cases. 2020; doi:10.4135/9781529734867

Table 1

Table 1 is not included with this version of the manuscript.

Supplementary Files

This is a list of supplementary files associated with this preprint. Click to download.

- AdditionalFile.docx
- AdditionalFile.docx