

Qualitative study on the Community Perception of the Integrated Management of Childhood Illness (IMCI) Implementation in Lahej, Yemen

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دراسة نوعية عن تصورات المجتمع حول التدبير العلاجي المتكامل لأمراض الطفولة في لحج - اليمن

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المخلص: الهدف: استطلاع تصورات قادة المجتمع والأمهات حول الخدمات الصحية وأداء المجتمع في ما يخص صحة الطفل في لحج- اليمن منذ تطبيق استراتيجية التدبير العلاجي المتكامل لأمراض الطفولة في 2003. الطريقة: تم إجراء مقابلات معمقة وجهاً لوجه مع ستة من قادة المجتمع وسبع أمهات في عام 2007 في المديرية الثلاث التي تطبق تلك الاستراتيجية بمحافظة لحج في اليمن. النتائج: لم تبد مجموعتنا الدراسة إدراك الاستراتيجية ولكنهم أبدوا تصورات إيجابية حول الخدمات المقدمة. فيما كان قادة المجتمع "غير متيقنين من دور اللجان الصحية ومشاركة المجتمع إلا أنهم أكدوا أن "المجتمع يمكنه المشاركة بطرق مختلفة" وأن "القيادات الصحية يجب أن تلعب دوراً أكبر". كما أكدت الأمهات "قلة موارد العيش والظروف البيئية" و "عدم وصول رسائل المشورة التثقيفية البارزة لهن". الخلاصة: أن الحاجة ماسة للتبني الجاد للمكون المجتمعي لاستراتيجية التدبير العلاجي المتكامل لأمراض الطفولة نظراً لشدة وطأة الظروف المعيشية والبيئية وعشوائية المبادرات المجتمعية لدعم صحة الطفل والتي عطل تطبيقها الدعم الحكومي غير الكافي.

مفتاح الكلمات: استراتيجية التدبير العلاجي المتكامل لأمراض الطفولة. المبادرات المجتمعية. الدراسة النوعية. اليمن.

ABSTRACT Objectives: This qualitative study was aimed at exploring the perceptions of community leaders and mothers about health services and community actions pertaining to child health in Lahej, Yemen since the Implementation of Integrated Management of Childhood Illnesses (IMCI) in 2003. **Methods:** Face-to-face, semi-structured, in-depth interviews were conducted with six community leaders and seven mothers in 2007 in the three districts of Lahej Governorate, Yemen, that are implementing IMCI. **Results:** Neither group was aware of IMCI, but had "positive perception to the services." Community leaders expressed "uncertainty about the role of health committees and community participation," and said, "people can contribute in different ways" and "health authorities must play a more active role." The mothers emphasised, "poor livelihood and environmental conditions" and "salient counselling messages not received." **Conclusion:** The pressing needs for effective community-IMCI is obvious owing to the appalling toll on child health of unfavourable livelihood and environmental conditions and disorganised community initiatives. Thus, for effective IMCI implementation, governmental support needs to be strengthened.

Key Words: Integrated Management of Childhood Illness; Community initiatives; Qualitative study; Yemen.

Advances in Knowledge

- This is the first study on IMCI in Yemen in general and its community component in particular.
- Despite some improvement, suboptimal family practices pertaining to child health in Yemen still prevail.
- The study revealed appreciation for the positive role of child health services staff despite the complaints about the insufficient governmental support.
- Also revealed were a diminished role of community-based health workers and poor community initiatives to support child health.

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Application to Patient Care

- Integrated Management of Childhood Illness (IMCI) providers should employ proper counselling and effective communication skills when approaching mothers.
- Strengthening health system support is a must to maximise the benefit from the comprehensive effect of IMCI on child health.
- The role of health committees, community-based health workers and community initiatives to support child health need to be increased.
- Innovative approaches such as the positive deviance technique could be very helpful in enhancing the role of IMCI in child health improvement.

THE INTEGRATED MANAGEMENT OF Childhood Illnesses (IMCI) is a broad strategy developed in the mid-1990s designed to reduce child morbidity and mortality and improve the growth and development of children under five in developing countries. It encompasses three components aiming at improving: skills of health providers, the health system, and family and community practices. However, the community component of the IMCI strategy (C-IMCI) was globally introduced later than the health worker training and health system components. Experience has been gained only recently on how to adapt and implement C-IMCI interventions effectively.¹ Besides focusing on a set of family practices that are important for child health and development, C-IMCI encourages the development and implementation of community- and household-based interventions. These increase the proportion of children exposed to these practices,² and creates a groundswell of community involvement and commitment to sustain initiatives for health.³ The C-IMCI was initiated based upon the realisation that a facility-based strategy would not reach significant portions of the population that did not have access to or chose not to use a health facility.⁴ Evidence has shown that up to 80% of deaths of children under five years of age may occur at home with little or no contact with health providers care even though the large majority were living within a few kilometres of health facilities.³ In its essence, C-IMCI attempts to coordinate health services initiatives with actions carried out in the community, involving all possible actors and sectors at the local level, in order to promote family and community practices for the care and protection of children in the home and community. The family itself and the

social networks are the main target of the interventions being developed.⁴ Advocates of IMCI argue that, if C-IMCI is to be effective, sustainable communities need to be empowered to take responsibility for their own health. For C-IMCI, this means that communities must develop a sense of ownership of the twelve key practices that cover promotion of growth and development, disease prevention and appropriate home management and care-seeking outside the home and assume the responsibility for practising and promoting them over the long term.⁵ In Yemen, the IMCI strategy started in 2000.⁶ So far, scarce data are available about IMCI implementation in Yemen. This study was aimed at exploring the perception of community leaders (CLs) and mothers about health services and community actions pertaining to child health in the Lahej Governorate of Yemen since IMCI implementation in 2003.

METHODS

STUDY SETTING

Lahej is a Yemeni governorate located in south-western Yemen with a total population of 722,694 inhabitants and an area of 13,046 sq. km.⁷ Ninety five percent of the population lives in rural areas and works in agriculture. The Governorate consists of 15 districts most of them located in coastal areas. Lahej was selected because it is one of the most effective Yemeni governorates in terms of implementation of health programmes. It also has good supervision, by the central health office in the Governorate's capital city, Al-Hawta, of the activities in the peripheral districts. Furthermore, the researcher was familiar with this governorate after working and living in it for three years. The

Table 1: Characteristics of the interviewees

Age (years)	Education	Status
Community leaders		
34	Secondary school	Member of the local council for 6 years, head of planning, development and financial committee in the local council.
37	Secondary school	Teacher in basic school, member of the health committee for 4 years.
50	Basic school	Sheikh of a district, member of the local council.
42	Basic school	Merchant in the fishing sector, new member of the local council.
35	Bachelor of history	Teacher and director of Youth and Sport Office in a district.
47	Secondary school	Sheikh of a district, member of the local council.
Mothers		
31	Secondary school	Teacher in basic school, 3 children, youngest 2 years.
33	Secondary school	Teacher in basic school, 5 children, youngest 3 years.
26	5 years basic school	Housewife, 1 child aged 17 months, 2 children died, currently pregnant.
19	9 years basic school	Housewife, 2 children, youngest 6 months.
35	4 years basic school	Housewife, 8 children, youngest 18 months, currently pregnant.
26	Illiterate	Housewife, 5 children, youngest 18 months.
28	9 years basic school	Housewife, 5 children, youngest 9 months.

study was conducted in the three districts of Lahej that had been implementing IMCI since 2003 (Tor Al-Baha, Al-Madhareba-Ras-Al-Ara, and Al-Melah).⁸

PARTICIPANT ENROLMENT

This qualitative study targeted CLs and mothers of children aged 2-23 months. They were purposively identified in the course of a quantitative study assessing child health indicators of C-IMCI conducted during the period January-September 2007. A purposive sample is a non-probability non-representative sample commonly used in qualitative inquiries targeting a particular group of people in the community thought to be difficult to locate and recruit.⁹ Potential CLs were first identified by the health providers in the three districts. Later, a snowballing technique, particularly useful in hard-to-track populations, was used to identify additional members to be included in the sample, by requesting further names from those CLs who responded.^{9,10} CLs and mothers who were available in the study period and agreed to participate were interviewed. Six community leaders (two from each district) and seven mothers (two from each of two districts and three from one district) were included. The basic characteristics of the participants are summarised in Table 1.

DATA COLLECTION & ANALYSIS

Individual face-to-face, semi-structured, in-depth interviews using an interview guide were conducted by the first author [Tables 2 & 3]. The purpose of the study was explained at the start of the interview, each respondent’s written or oral consent obtained and confidentiality assured. Free expression was encouraged and probing used when necessary to elicit deeper understanding of issues. The researchers audio-taped the interviews and any relevant contextual remarks were recorded. Interviews were 60-75 minutes for CLs and 50-70 minutes for mothers. The study was approved by the Institutional Research and Ethics Committee of the Universiti Kebangsaan, Malaysia.

Data analysis took place alongside data collection to allow questions to be refined, and new avenues of inquiry to develop and shape the ongoing data collection. Interview tapes were transcribed within 48 hours of the interview. To ensure data credibility and dependability,¹⁰ the textual data were translated separately into English language by the two researchers, then reviewed together and triangulated to reach better understanding. A content analysis was used to interpret the findings⁷ whereby the transcript was read repeatedly and then categorised into words and phrases to find meaningful relationships between the themes that emerged.

Table 2: Assessment of Child Health Indicators of the Community Integrated Management of Childhood Illness (C-IMCI) and its Determinants in IMCI and Non-IMCI Districts in Lahej, Yemen

2a: Interview questions for Community Leaders:

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- In your opinion, how could you evaluate the current level of child health services and child health status?
 - What could be done at the level of the household and community to help in reducing child morbidity and mortality in the community? How could you work to support such activities?
 - In your opinion, to what extent is the community involved in the work of the health facility? How do you think the community could be involved in providing feedback on the quality of care and in the actual management of the health facility? What could be your role in strengthening community involvement in the provided health care?
 - What is your opinion about the current level of community-based health related initiatives? What could be your role in supporting such care?
 - Generally, what are the possible ways of improving the health status of children?
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2b: Interview questions for Mothers: Assessment of Child Health Indicators of the Community Integrated Management of Childhood Illness (C-IMCI) and its Determinants in IMCI and Non-IMCI Districts in Lahej, Yemen

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- To what extent do you think the current level of availability of medicines, vaccines, and supplies are satisfying the needs of the community?
 - What is your opinion about the way the health workers deal with you? Do you feel that you are treated with respect? Why?
 - What do you think about the way the health workers communicate health messages to you? To what extent could you freely communicate your ideas, concerns and expectation about the health of your children to them?
 - To what extent would you be able to communicate your opinion about health services?
 - What activities do you do at home that could help in improving your children health?
 - What encourages you to seek care from the governmental health facility in your area?
 - Do you think there is any difference in seeking care for your youngest child compared to an older one (3 years ago)? What are these differences?
 - In your opinion, what are the positive aspects of seeking care from the governmental health facility?
 - In your opinion, what are the negative aspects of seeking care from the governmental health facility?
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RESULTS

The results of the analysis of each group are presented separately. Altogether, 14 themes emerged from the analysis: six from community leaders and eight from mothers.

INTERVIEWS WITH COMMUNITY LEADERS

Theme 1: Not aware of IMCI but positive perception of child health services

The CLs interviewed were not aware of any strategy to improve child health. However, they said that there was noticeable support for child health: “improvement in child health services,” “starting distribution of mosquito bed nets” and “improvement in child health status.” They gave examples: “we do not hear anymore about some diseases like *Judari* (smallpox), *Shalal Al-Atfal* (poliomyelitis), or *Hasbah* (measles).”

Theme 2: The community had various different

perceptions of the care provided

CLs had different views on how the community perceived the health care services and explained varying degrees of community dependence on the health facilities. The first type of response was the most positive one and expressed by the two sheikhs in the study: “People are dependent on the services provided by the health facility”; “People appreciate the improvement in health services especially home visits”; “The relation between the community and the hospital is good despite the shortage of drugs and doctors.”

A somewhat different response was given by others: “People have no choices because they are poor.” (a merchant and new member of the local council); “People do not complain because health providers are very cooperative. If they do not find the expected care, they go to another place” (old member of the local council).

A completely different response was also provided by the two teachers: “The community is not totally de-

pendent on our health facility due to lack of a laboratory which is necessary for malaria and *Faker Al-Dam* (anaemia) investigation. People use the facility mainly as first aid.”

Theme 3: Different ways to improve the health of the family in general and of children in particular

Families have an important role in the health of children as agreed by CLs who believed in: “the necessity to do something for the communities.” Different responses were expressed. A new member of the local council said: “I will work when it becomes possible. Only I participated in the planning and distribution of the mosquito bed nets.”

A teacher in one village expressed what he did and was intending to do: “I am trying to communicate advice on how to avoid malaria in schools. Unfortunately, there is no child-to-child programme to communicate educational messages. I will try to adopt this programme through the health committee.” A sheikh of an area stated: “I am working through the health committee to improve the health services and the relation between the community and the health facility.”

On the other hand, the role of the volunteers and their home visits was greatly appreciated although, as the CLs explained, it was restricted to immunisation and reproductive health services. Volunteers are usually trained by IMCI health providers who tried through personal initiative to train unpaid volunteers in issues related to child and maternal health. However, such initiatives are not universal in all areas. In addition, the follow-up of these volunteers and their reports was performed in an unorganised way. In a parallel context, the United Nation’s Children’s Fund (UNICEF) conducted a training course for 36 women as community communicators in one district in IMCI related issues. The training was aimed at building a volunteer health education team to educate mothers at homes and social gatherings like funeral and wedding ceremonies. However, there was no agreement on the selection mechanism of the community communicators and no organised ways on how to communicate the information later to the community. On the other hand, four CLs agreed that: “the role of civil society organisations is either absent or not noticeable and not respected by the community as these organisations are not present on a continuous base and consist of non-trustworthy persons”. It was only in one area

(Ras-Al-Ara) that the local organisation of fishermen was greatly appreciated and complimented by the CLs for its role in providing a partial supply of water and electricity to the area from its profit.

Theme 4: Uncertainty about the role of community participation

With regards to community participation, different responses were reported. A local council member expressed his idea: “The only form of community participation is buying drugs from the Drug Fund.” A teacher had a contradictory opinion: “People do not exhibit any community participation even financial support. The person responsible for this is the director of the health facility and the health committee because they do not arrange meetings and ignore the role of the local council.” A positive form of community behaviour was explained: “Community participation in health is not clear, but it is noticeable in other issues. For example, the community participated with 10% financing of the UNICEF water project and 10% of the World Bank project for building a secondary school” (sheikh in one district). “The civil society organisation helped to ensure water and electricity to the hospital” (sheikh in another district).

However, almost all CLs argued that community participation could be more effective if people were more informed and involved in the community and health facility problems: “People do not know what to do because we do not tell them. The picture might be different if they knew.”

Theme 5: No consensus about the role of health committees

There is a health council at the district centre and health committees at the village level. Each usually consists of four to five influential persons in the community like teachers, the sheikh, the imam, or a representative of the local authority beside the director of the health facility. The health committee is the “connecting body” between the health facility and the community members. CLs’ evaluations of the role of the health committees differed. While a teacher confirmed: “There is no role for the health committees and I never heard about them”, a member of a health committee expressed his feeling: “The role of health committees must be strengthened and people should select them from more respectable persons to make it easy for people to accept them. In the committee,

we report the obstacles facing better delivery of health services to the higher levels, but no one responds to our reports.”

Other CLs had different opinion about their health committee: “It plays an important role in connecting people with the health facility. Currently, the committee is playing an important role in malaria control by putting in bed net distribution and spraying of mosquito breeding sites.”

Theme 6: Health authorities must play a more active role

CLs’ opinions on how to improve community health status were focused on the role of the health facilities: “Health status can not be improved unless health services are improved by increasing its financial resources. Home visitors should receive some incentives and be allowed to give drugs” (sheikh in one district). “Upgrading health personnel and offering doctors and laboratories” (sheikh in another district). “Building health facilities in the very remote areas, training midwives for these areas and health education in schools and mosques” (teacher with a bachelor’s degree). “Strengthening the role of health committees to improve the dialogue between the health facility and the community” (another teacher). “More integration between the health facilities and the community. Health facilities need to involve the communities in their work by regularly allowing CLs to attend their meetings” (old member of the local council). “Civil society organisations and non governmental organisations (NGOs) should have a stronger role” and “Improving the living conditions particularly the insufficient and bad quality of water”(new member of the local council).

INTERVIEWS WITH MOTHERS

The mean age of interviewed mothers was 28.3 years. The mean years of schooling among literate mothers were 8.5 years. The interview results can be summarised in eight themes as follows:

Theme 1: Unfavourable livelihood and environmental conditions

All mothers began their talk hoping for future help. They explained about: “Poor status”; “Poor living conditions”; “Lack of money”; “Poor markets that lack essential foods”; “Lack of continuous supply of water and electricity”; “No fish, fresh vegetable or fruits. Our children depend on rice and potatoes”; and “No secondary schools for girls.”

Theme 2: Health staff kind, but only provides basic treatment

Mothers agreed that, despite the positive role of health providers, there were deficiencies in the services. The majority agreed they were receiving first aid only, nothing more. A 31 year old teacher stated one deficiency: “Health workers are very cooperative, but the health facility provides only simple drugs, not strong antibiotics (injections).” Another teacher (33 years old) was more specific: “Health workers are doing their best. They can come to any house even at midnight. However, they haven’t many things to provide such as investigation for *Faker Al-Dam* (anaemia) or malaria, *Ashiah* (X-rays), labour facilities, vitamins or supplementary foods”.

Theme 3: There is improvement but more is needed

Mothers’ evaluations of the changes in the health care for the youngest child compared with the oldest children (within the last three years) differed. While two of them stated: “The care is *sawa sawa* (the same),” others had different opinions: “Vaccines became more available and there is more education. Family planning methods are always available” (31 year old teacher). “There is improvement in simple services. We are much better here than many neighbouring villages” (19 year old housewife). “There is improvement, but it is not enough” (33 year old teacher). “There is noticeable improvement in the care provided. They come to our homes to vaccinate children or send announcements to attend on certain time” (33 year old housewife with 8 children, and 28 years old housewife with 5 children).

On the other hand, three mothers mentioned home visits, but what happen in these visits was differently explained: “Volunteers came to weigh children” (illiterate mother). “They did not speak about how to take care of my children, but motivated me to go to the health unit if there is any problem” (33 year old teacher). “Home visitors speak about maternal health and breastfeeding.” (19 year old housewife). Another woman said that she had never been visited by home visitors: “I live a little bit far from the health unit. No health volunteers had come to me except two persons from the health committee to follow up the water project” (31 year old teacher). However, all mothers stated that: “We do not feel the role of the local council members.”

Theme 4: No point complaining, find alternatives

Mothers gave different responses about their ability to communicate any ideas or comments about the provided care: “We can complain, but I did not hear of any previous complaints” (33 year old teacher). “We can speak with health workers, but if there is no improvement we go to the nearby district” (31 year old teacher). “We cannot complain. If they deliver care we gratefully accept it, if not, we do not say anything and we go to Aden” (illiterate mother). “We do not feel there is a need to complain” (remaining four mothers).

Theme 5: Salient counselling messages not received

Educational messages from health providers were mentioned by all interviewed mothers although some messages appeared not clearly understood: “They always advise us to take care of our children, particularly breastfeeding and vaccination. Sometimes they explain when we need to bring our children to the health facility” (all mothers). “Health workers try to speak with me and to give me time, but sometimes I cannot understand what they said” (illiterate mother). “They emphasised the importance of breastfeeding. Therefore, I exclusively breastfed my youngest child for six months. However, there is some advice that I do not follow. For example, they said I need not to give water to the newborn after delivery and during the first six months, but I gave because I do not know why. Later, I gave the artificial milk through bottle because I am working; however, I insisted on breastfeeding for three years.” (31 year old teacher). “They always explain the role of exclusive breastfeeding, and accordingly, I breastfed exclusively for the first six months, but other things, I cannot follow” (28 year old housewife).

Educational messages were delivered verbally and on a collective base. Only one mother received the mother’s counselling card. Another mother said that she saw the card while they were explaining to her the importance of breastfeeding. The other five mothers said that they did not see or hear about it despite their regular use of the facility.

Theme 6: Mothers’ concerns about basic services

Mothers had different views about the advantages and disadvantages of using the health facilities in their areas. Perceived advantages were: 1. Education about maternal and child health; 2. First aid service; 3. Midwives from the community in some areas; 4. Kindness of health providers; 5. Free vaccines and some drugs;

6. Free supplementary food for mothers and children (only in one area). Perceived disadvantages were: 1. Lack of laboratory investigations and important drugs; 2. Lack of labour facilities in all health facilities except one, and of specialists particularly paediatricians and gynaecologists; 3. Ineffective control of malaria.

Theme 7: Consensus about the important role of families in child health

The mothers expressed a common idea that care at home is the most important factor for children’s health. Some family practices were given special emphasis: “Good diet, cleanliness, use of fumes or bed nets to control mosquitoes” (all mothers). “Breastfeeding for the first 4-6 months followed by family foods and fruits between meals. Foods like cheese and eggs are good but not artificial milk” (31 year old teacher). “Giving breast milk only in the first six months followed by good food like goat milk, cake and fruits and family food by one year of age” (19 year old housewife).

However, traditional practices such as applying oil on the child’s body at night and protective measures against cold as wrapping the child with heavy clothes were also mentioned by almost all mothers. Mothers’ responses clearly indicated that there is inadequate awareness about the whole range of the key family practices promoted by the IMCI strategy.

Theme 8: Insufficient knowledge to recognise signs of immediate care-seeking

Mothers expressed different reasons for immediate care-seeking. Four mothers said: “When the child is sick” without further explanation. Two teachers specified some signs: “When the child has fever or is unable to breathe easily”; “If the child can not eat or breastfeed, having fever, or becomes seriously sick.” On the other hand, another mother said: “I live alone with my children. Therefore, I used to come urgently if my children have anything.”

DISCUSSION

Through its community component, the IMCI has helped to reinforce beneficial home-based child care through active family and community participation, which, through intersectoral work coordinated at the local level, makes it possible to reach the most vulnerable population groups.⁵

In the absence of private health services, the study communities were dependent on their local governmental health facilities. The presence of such a trusting

relationship is very important to improve child-care practices and the uptake of health services.¹¹ The interviewees appreciated the kindness of the health providers and the improvement in health services and child health status after IMCI implementation. Such appreciation for IMCI is documented in many studies.^{2,12,13} However, complaints about the provided services were raised. The complaints of lack of doctors might not mean low competence of the paramedical providers. Instead, it might be related to the deeply rooted belief that “adequate” health care can be provided only by doctors,¹⁴ or that the relation between the community and the health providers was so intimate that the community considered these providers as less credible providers of quality professional healthcare. Alternatively, the community preference for doctors might be attributed to the laboratory investigations which doctors order compared to the “syndromic approach” of IMCI or to the attractively packaged medication doctors prescribe compared to those freely distributed from the IMCI health facility. The literature gives examples of good work performance among IMCI trained paramedical providers. Trained IMCI nurses showed good competence in South Africa,¹⁵ and performed as well as, and sometimes better than, doctors in Brazil¹⁶ and Tanzania.¹⁷

The presence of disease “warning signs” should lead the caregivers to seek care from a health provider outside the home.^{18,19} In the present study, mothers only recognised four out of the eight warning signs present in the Yemeni mother’s counselling card. Such poor recognition could be attributed to the fact that only one mother had received this card and another one only saw it whereas the other five have no idea about it. Alternatively, the inability of mothers to recognise these signs could be attributed to the failure of health providers to communicate such information. IMCI devoted increasing attention to training health providers on how to teach mothers about disease warning signs.²⁰ Ineffective counselling and suboptimal use of the mother’s counselling card might in part be responsible for the inability of mothers to realise some important child care messages. Simple, pictorial cards reminding the mother of several home care messages, and the signs indicating the need to return immediately to the health facility (HF) are being developed in many countries including Yemen.²¹

In rural areas of developing countries, several reasons support the use of community health workers

(CHWs). Compared with the HFs, CHWs are geographically closer and available when health facilities are closed. In addition, CHWs can help ensure that treatment at home is appropriate and function as a bridge between HF and households.²² In Ethiopia, CHWs diagnose and treat fever,²³ while in Pakistan, Lady Health Workers are a pivotal component of the national health system.²⁴ Furthermore, CHWs have shown to have great potential in extending the IMCI strategy into the community in India and Nepal.²⁵ The present study explored difficulties facing the experience of CHWs. First, CHWs were not present in every locality visited. Their home visits were restricted to reproductive health and immunisation except in some villages where some women were trained as community communicators. Secondly, their training was usually done by external bodies without involving the local health providers which might not result in work integration between health facility providers and CHWs. Thirdly, there was no continuing system of recruitment, training, and supervision of a cadre of volunteers to meet health care needs. Fourthly, many of the CHWs were unpaid volunteers that began their work enthusiastically, regularly sending reports to the health committee, but later their role gradually weakened. It was reported that of 1,200 trained community communicators in IMCI-Yemen, only 10%-20% were still reporting to the nearest health facilities.²⁶

The literature also discusses ways to improve the sustainability of CHWs^{3,5,25} that could be applicable to our Yemeni context. A community will appreciate CHWs’ contributions more if it has participated in their selection, training and supervision. This may engender a willingness to motivate and reward CHWs. Some non-monetary incentives were proposed including support from both the formal health system and the community. These include elevated community status and personal growth through the acquisition of new skills. Health facility staff can also motivate CHWs through supportive supervision and recognition (i.e. attending community meetings with the CHWs and allowing them to refer cases and distribute basic medicines). In El Salvador, non-monetary incentives were found to be insufficient to combat the marketability of the lucrative new skills of the CHWs. Some programmes, have decided to integrate income-generating activities into the set of interventions to allow for community reward of the CHWs.⁴ In the present study, the need for monetary incentive for the CHWs

was indicated, perhaps, due to the poor economic status encountered in the study districts.

Mobilisation of all community actors could have a positive influence on the health of community members. This is a process through which health improvement actions are stimulated, planned, carried out, and evaluated by a community's individuals, groups and organisations on a participatory and sustained basis.²⁷ It begins with creating a fuller community understanding of the goals of health programmes and moves on to increased community involvement in health decision-making and management.³ In the study areas, community-based activities appeared to be patchy and ineffective. Although communities were participating in some activities like water and electricity projects and building schools, their participation in HF issues was not significant perhaps due to insufficient linkage between the HFs and their communities. On the other hand, the mechanism of member selection for health committees was unclear in contrast to what is seen in the literature. Conventionally, health committees consist of influential people elected by their communities to be responsible for management of village health-related activities.⁴

Substantive collaboration between many sectors is needed to influence the health of a community. The advocates of C-IMCI provided several frameworks for its implementation all emphasising the importance of a multisectoral approach for supporting sustainable child health. The Multisectoral Platform (MSP) addresses social, economic and environmental factors that facilitate or hinder the adoption of the key family practices,⁵ the logic behind it being that people may find it difficult or impossible to adopt new behaviours if other problems that they face, such as food insecurity or lack of access to clean water, are not also addressed.⁴ Given the level of community initiatives encountered in our districts, it could be reasonable to conclude that the poor level of living conditions will continue to have a detrimental effect on child's health unless sustainable improvement is ensured. This cannot be achieved without serious adoption of C-IMCI as shown by examples from many countries.²⁴ In the Eastern Mediterranean Region, a number of community-based interventions are being implemented to address health, poverty and development. The Basic Development Needs Programme is a useful example; it seeks to promote a comprehensive approach for development to meet community priority needs in-

cluding health, education, means of livelihood, water supply, sanitation, improved roads, provision of electricity, etc. It yielded promising success in Afghanistan and Somalia.²²

Non-governmental organisations (NGOs) are important stakeholders to promote child health. Through the MSP, NGOs focus on strategies for linking broader development activities with child health improvement by working with families in the context of community health education, literacy classes, micro-enterprise and environmental sanitation.⁵ Yemen could benefit from the example of Ghana where an NGO has made a link between social and economic development activities and the promotion of specific health behaviours. The programme combined village bank services for women with education in breastfeeding, child nutrition, diarrhoea control, immunisation, and family planning. The combination of credit with education resulted in better food security, better breastfeeding practices and improved nutritional status, particularly of young children.³ However, the Yemeni CLs in the areas studied believed that their communities did not get the maximum benefits they deserved from the NGOs. It is striking to note that the local civil society organisations and initiatives were either absent or only had a weak role. Furthermore, the community's lack of trust towards these bodies was noticeable in all areas except one.

Fortunately, C-IMCI is unrestrictive and involves many innovative approaches.^{3,4,27} One of these approaches could be the "child-to-child" programme which was mentioned by a teacher in this study: children could be given the knowledge and tools to disseminate health messages within the community and households since older siblings have a role in educating and caring for younger ones.³ Schools are good places for communicating such health messages and 'advertising' healthy practices because of the potential for learning and modelling during the formative years.²⁸ Teachers could help to integrate basic health messages within the school curriculum.

CONCLUSION

The pressing need for effective C-IMCI is obvious. This is clear from the appalling toll on child health of poor livelihood and environmental conditions and disorganised community initiatives, which are further hampered by insufficient governmental support. Strengthening community mobilisation and capacity-building

activities to enhance the commitment of community members towards health improvement and ensuring their effective involvement in both facility and community health initiatives are mandatory. Additionally, the study found suboptimal family health practices in the districts visited. The solution would be to strengthen counselling mechanisms through effective communication techniques. Innovative approaches such as Positive Deviance (PD) could be helpful as it has given promising results in more than 20 developing countries. PD is based on the premise that in communities where everyone faces serious resource limitations, some families still find a way to keep their children healthy.²⁹ Thus, IMCI staff and community members could identify the unique practices of some community members (positive deviants) that enable them to cope more successfully within the same resource-base. Once identified, staff and community can develop strategies to enable all members of the community to learn about these practices and to adopt them. This can improve care-giving, nutrition and hygiene and other practices that contribute to child health.

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