Medair Health Project in Bekaa Valley

Health and Nutrition Knowledge, Practices and Coverage

2020 Household Survey Report
&
Multi-Year Analysis 2016-2020

FINAL

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Prepared for

Medair Lebanon

Dr. Terrence Jantzi

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Acronyms

ANC	Ante-Natal Care
ARI	Acute Respiratory Infection
CHV	Community Health Volunteer
CMW	Community Midwife
DPT	Diphtheria and Pertussis and Tetanus
EBF	Exclusive Breastfeeding
EU-MADAD	EU Regional Trust Fund in Response to the Syrian Crisis
FP	Family Planning
GAC	Global Affairs Canada
HH	Households
IAMP	Inter-Agency Mapping Project
ITS	Informal Tented Settlement
KPC	Knowledge, Practice, and Coverage
MCH	Maternal and Child Health
MMR	Measles Mumps Rubella
MOSA	Ministry of Social Affairs
MOPH	Ministry of Public Health
NCD	Non-Communicable Diseases
NGO	Non-Governmental Organizations
ODK	Open Data Kit
ORS	Oral Rehydration Solution
PHC	Primary Health Care
PNC	Post-Natal Care
PPC	Post-Partum Care
PPT	Percentage Point
PSS	Psycho-Social Support
RH	Reproductive Health
SBCC	Social and Behaviour Change Communication
SDC	Social Development Centre
STI	Sexually Transmitted Infections
TOR	Terms of Reference
UNICEF	United Nations Children Fund
UNHCR	United Nations High Commissioner for Refugees
UNHCHR	United Nations High Commissioner for Human Rights
WASH	Water Sanitation and Hygiene
WHO	World Health Organization

1   Executive Summary

Introduction

Since 2014, Medair has been supporting the MOSA in the health centres of the Social Development Centres (SDCs) and the Community Health volunteers (CHVs) and community midwives in their community outreach work. Medair supports the clinics through the provision of human resources, medicines, equipment, capacity building and supportive supervision to each of the clinics. Since 2014, Medair has supported seven different SDCs throughout the years and in 2020, Medair currently continues to support five SDCs in the Bekaa Valley – Brital, Talia, Joub Jannine, Marj, and Kabelias (Qabb Elias). Funding to support the Medair health project comes from an array of donors, of which EU-MADAD and Global Affairs Canada (GAC) are the primary donors. The current funding cycle extends from 2016-2021.

The current health project activities focus on supporting three main objectives:
1. Improving access of mothers with children under five to primary health care services
2. Improve the quality of health care services provided by the MOSA SDCs.
3. Increase the health, nutrition, and hygiene awareness and practice among mothers with children under five.

Key project areas under these objectives include supporting health behaviours among mothers including:
1. Health seeking behaviour.
2. Diarrhoea and respiratory tract infection management for children
3. Vaccinations
4. Reproductive health managements
5. Breastfeeding practices
6. Access to reproductive and psychosocial services.

To track performance against these indicators, a standardized annual Knowledge, Practice, and Coverage (KPC) household survey is applied to a random sample of mothers with children under 5 – both Syrian and Lebanese – in the Medair supported SDC project areas. Medair conducted its first KPC survey in November 2015 and has repeated the survey each year. The survey data is used to not only track project indicator progress but also to provide evidence for the MOSA and MOPH regarding the MCH situation in the Bekaa valley and further inform future decision-making, advocacy, and programming.

Methodology

This is the fifth year of the current project cycle and this exercise is intended to be a summative report on the targeted health indicators with suggestions for future programming engagement. The purpose the analysis is two-fold:
1. Analyse and report on the data collected from the KPC survey for 2020.
2. Carry out a comparative analysis against the earlier datasets from 2016-2020 to identify significant trends.
3. Propose suggestions for future programming implications.

In all the years, the data collection and sampling processes followed a standardized procedure with data collection in 2020 taking place during the month of October 2020. A two-stage cluster sampling approach was employed to achieve a 95% confidence level and a 5% margin of error to the total population.

Table E1: Sample size by year

	Total	Syrian	Lebanese
2016	753	367	386
2017	1298	634	664
2018	2233	1482	751
2019	2287	1529	758
2020	2685	1767	918

For the 2020 dataset, six social factors were assessed against results to determine degree of influence. The variable profiled are:

1. SDC
2. Location within Catchment Area
3. Nationality
4. Whether married before age 18
5. Whether can read or write
6. Whether participated in Medair activities

Table E2: 2020 Demographics

Demographic	Syrian Refugees	Vulnerable Lebanese
Number	1767	918
Cannot read or write	44.8%	4.9%
Married under 18 years	44.9%	14.9%
Participated in Medair activities	44.1%	28.4%
Mean Age of Respondent	28.9	30.7
Mean Age when married	18.5	19.8
Mean number of children under 5	1.8	1.30
Mean age of youngest child (months)	19.8	26.6
Gender of youngest child	53% boys	53.6% boys
SDC Coverage Area		
Marj	20.4%	16.4%
Britel	12.2%	31.7%
Jannine Joub	21.9%	19.4%
Kabelias	23.7%	13.0%
Talia	21.7%	19.5%

The processes for data collection and the sample population have been maintained relatively constant across the years, allowing for comparisons among the years. The comparison across individual years was generated from the multi-year SPSS database. There are one of four patterns that can be seen on a multi-year analysis.

- **Increasing**: Denotes steady year to year increase in the percentage of respondents on an indicator
- **Decreasing**: Denotes a steady year to year decline in the percentage of respondents on an indicator.
- **Stable**: Denotes variations year to year that all within the overall margin of error. This likely means no real changes in this indicator over time.
- **Volatile**: Denotes variations year to year that have no common pattern, but which exceed the margin of error. This likely means a survey reliability issue with a question phrased that confuses respondents or which assumes a level of knowledge they do not possess.

Findings

Demographics

Syrian refugee mothers tended to be younger, to be married at an earlier age, have more children under five in the households, and whose youngest child was younger. Syrian mothers were also more likely to not be able to read or write, and to have participated in Medair activities. When examining across the multi-year datasets, the demographic patterns were the same. In terms of analysis, this is good in the sense of being able to generalize better across years. However, it also reflects that **there has been relatively little change in social items such as literacy levels, or the number of children under five in the households**.

Health Seeking Behaviour

The incidence of need for health treatment has stayed consistent throughout the entire five-year cycle and there is no difference among Syrian refugees and vulnerable Lebanese regarding needs over time. The vast majority of respondents (90+%) report that they do seek out treatment at least some of the time. What has changed over time – in a positive direction – is the percentage of respondents that are reporting seeking out services all the time they needed health treatment. This increased by more than 12-15 ppt since the start of the project cycle for both Syrian and Lebanese mothers. In addition, the reasons given for not accessing the SDCs do not have to do with quality. The Medair supported SDCs have played an increasingly more prominent role in providing a health treatment option. **The logic of the establishment of the SDCs has been to reduce the strain on the overall health system architecture and this appears to be valid in logic and successful**. In particular, SDCs serve as an important resource for more vulnerable populations. **Women who cannot read or write, were married early, and who are refugees are more likely to be using the SDCs as an option and the Medair SDCs in particular**. Those who participated in Medair activities were more likely to seek treatment at SDCs which suggests that **Medair activities are supporting the connection to SDC usage.**

MCH Management

Following on from health seeking behaviour in general, there have been gains in terms of MCH management including for treatment of children with ARI and Diarrhoea as well as for household level incidence of diabetes and hypertension. **There has been a decline in the incidence of all four of these diseases (ARI, Diarrhoea, Diabetes, and Hypertension) since the start of the project cycle**.

ARI cases have substantively reduced since 2016 by more than 30 ppt and diarrhoea by more than 20 ppt in the same timeframe. Given that the sampling occurs at the same time frame each year (thus limiting seasonal variations), this *may* **reflect general improvements in the community hygiene infrastructure such as improved access to Water, Sanitation and Hygiene (WASH)**. However, validation of this connection would require further study. While there has been a decline in the incidence of these diseases, **there does not appear to have been any changes in terms of the mothers' behaviour in seeking treatment over the project cycle**. The percentage seeking treatment has always been high, so it is not surprising that there would be relatively little movement on behaviour change.

Dispensaries (SDCs) are playing a much more prominent role as a resource for women to seek treatment for ARI and for diarrhoea. There has been an approximate 20 ppt increase in seeking treatment at dispensaries since the start of the project cycle. The increase in dispensary usage is associated with a decline in hospital or doctor usage which again, reaffirms the logic that the dispensaries are fulfilling their role in helping reduce strain on the health system facilities. **The type of medicine administered to sick children has also changed**. For diarrhoea, there has been an increase in children receiving ORS of more than 30 ppt overall. For ARI medication for fast or difficult breathing, antibiotics have stayed relatively stable across the project cycle (reported one third of the time). There has been an increase in the administration of both pain killers and antihistamines for ARI as treatment options. For severe ARI (cough AND fast breathing), there has been no change in the percentages of the different treatments over the five years except for a substantive drop in 2020 on all treatments. This 2020 drop is likely related to COVID-19 restrictions.

NCD changes are milder, but still positive. Diabetes have not changed much over the project timeframe but reported cases of hypertension have declined (about 7 ppt since 2016). It *may* be that **the declines are linked to strengthening the overall health system or environment rather than as a result of specific project activities for SBCC**. However, further study would be required to track this linkage.

RH Services and Family Planning

There are four RH services– ANC, PNC, FP, and STI – but **ANC and PNC are the most frequently cited during open-ended questions regarding types of RH services available.** In 2020, the vast majority of both Syrian and Lebanese mothers could cite ANC (90%) and PNC services (80%). However, less than a third could cite FP and less than 20% could cite STI services. More positively,

knowledge of RH services and their locations has increased for both Syrian refugees and Lebanese mothers during the project period with a much greater degree of increase among Syrian mothers.

For both populations, **dispensaries have assumed an increasingly prominent role in people's minds for RH services within a nearly 60 ppt increase for Syrian mothers and about half of that for Lebanese mother**s. As with general health treatment, **dispensaries are particularly important for more vulnerable populations** including women who cannot read or write or who were married young. Participation in Medair activities is also linked to increased knowledge of RH services and their locations – especially for relying on dispensaries as their resource. This is a **positive reflection on the role of Medair's work in supporting the strengthening of the SDCs for RH services**.

Relatively few mothers actually reported accessing any RH services. There has been an increase in mothers accessing ANC and PNC services since the beginning of the project cycle. Especially for Syrian mothers accessing PNC services. There has been **no real change in mothers reporting that they accessed FP or STI**. **Participation in Medair activities did result in participants being more likely to seek out ANC and PNC services**.

About 30% of mothers reported discussing FP issues with someone. This has increased since the beginning of the project cycle by about 5-6 ppt. However, **most of the time, mothers are discussing FP informally with friends, family, or others.** Very few mothers discuss FP with trained service providers (about 10%). This has remained relatively constant throughout the project cycle. about 45% reported using any type of delayed pregnancy methods but only half of these were modern methods. The percentage of mothers reported using an FP method has stayed stable across the entire cycle, suggesting little behaviour change has occurred.

Only a very low percentage of mothers reported that the reason that they are not using a delayed pregnancy method was because they or their husbands wanted more children (less than 10%). The most common reasons for not using methods were because they were breastfeeding, did not like the methods, or were already pregnant. Since **breastfeeding does not delay pregnancy except under some specific circumstances, this reflects a misunderstanding regarding delayed pregnancy tactics** and perhaps this is the point of focus to be taken in future SBCC. Finally, **participation in Medair activities did increase the likelihood of using modern methods**.

Birth Management

This category covers six discrete dimensions: ANC, Delivery, Maternal Mortality, Documentation, PNC, and breastfeeding practices. As a collective whole, this dimension is relatively positive in terms of current behaviour as well as changes in behaviour over time. There are specific concerns on maternal mortality and PNC services yet that could be further addressed.

ANC appears to be a successful dimension with positive outcomes of which little extra attention is needed. **An increasing percentage of mothers have had at least four ANC visits during their pregnancy with 2020 levels extremely high (85%). Dispensaries, including the SDCs support by Medair, are continuing to play an important role in providing health service options to reduce the strain on the overall health system by being a resource for ANC service**. Syrian women were more likely to use dispensaries while Lebanese women were more likely to use private clinics.

There has been an increase across the project cycle in the percentage of Syrian women giving birth in the formal system (10 ppt) and by 2020 almost all mothers give birth in a hospital or clinic. The clinics have provided the important better local access to women that had been impeded by access in 2016.**The health system for delivery experiences a bottleneck because almost all mothers give birth in hospitals or clinics so there are fewer options for distributing health system support**. The implication is that this may result in an overcrowded health system to be able to properly care for mothers. Two ways this might be expressed is through the use of C-sections (for better planning of doctor time) and through shortened hospital stays for mothers after delivery. **Both of these factors suggest that there is still a gap in institutional capacities to support delivery.**

The percentages of mothers who died within one week of pregnancy are relatively small and declining over time (1.0% in 2020). However, even accounting for ambiguity in the time scope of when the mothers did, this low percentage would translate to a mortality per 100,000 live births rate that would be multiple times higher than the national rate for Lebanon. The rates are similar for both Lebanese and Syrian women suggesting that more could still be done on maternal mortality – especially in the context of improved health care services.

Syrian mothers are less likely to report having received a health booklet (80%) while Lebanese mothers are almost unanimous. Lebanese mothers received a health booklet no matter where they gave birth, but Syrian mothers were 10 ppt LESS likely to receive a health booklet when giving birth at a clinic compared to a hospital. **This suggests that clinic documentation support could be further strengthened as part of overall support to expanded institutional capacity at delivery**. For Syrian refugees, birth registration is increasingly taking place in Lebanon as the protracted nature of the crisis expands. The percentage of children born in Syria in the sample has declined 25 ppt since 2016 to currently only 5.5%. The percentage of mothers reporting their child does not have a birth certificate has remained stable across the cycle – but low at 6-7%. The percentage of children without birth certificates is higher for those children who were born in Syria where more than one-third of the Syrian-born did not have a birth certificate. Furthermore, nearly a third of the children without a birth certificate were less than six months old. Given these two factors combined with the overall high percentages with birth certificates, **the issue of birth certificates is not really a systemic issue, but more of a case management issue focusing on these children less than six months old or born in Syrian.**

The frequency of PNC visits is one of the more notable gaps with few women receiving the recommended three PNC visits within 40 days. Almost all mothers reported that their child received a health check upon delivery. However, less than 10% reported receiving another PNC visit within the first three days. The substantive majority of mothers (80+%) did report receiving a PPC visit within the first two weeks, but less than 10% of the mothers reported receiving three PPC visits within 40 days. **The increasing use of dispensaries and decline in hospital usage is important because it again affirms the project logic of the potential of the dispensaries to reduce the strain on other parts of the health system.**

Breastfeeding practices have increased over the cycle but are rarely exclusive breastfeeding. **Almost all mothers reported breastfeeding their child within the first hour. This percentage has increased since 2016 for both Syrians (25 ppt) and Lebanese (10 ppt).** The vast majority of women who did not breastfeed was because of the lack of milk which suggests **that SBCC activities focused on raising awareness may not change behaviour since the primary barrier appears to be a physical issue**. It may be helpful to explore future activities that support physical difficulties for breastfeeding.

More than 80% of the mothers reported breastfeeding their child for six months. However, less than 10% of mothers in 2016 reported exclusive breastfeeding for the entire six months. There were two measures used for assessing exclusive breastfeeding – 24 hour recall and summative over the first six months. For the 24-hour recall method, nearly 40% of the respondents reported exclusive breastfeeding within the past 24 hours. These patterns combined suggest that **mothers are willing to breastfeed and will breastfeed for an appropriate length of time, but long-term exclusive breastfeeding is rare** even though they will practice 24 exclusivity periodically throughout the first six months. This suggests that **the most useful point of focus in future programming may be to start with increasing the frequency of 24-hour exclusivity throughout the first six months**.

Vaccination Coverage

In 2020, just over 40% of the mothers could produce a vaccination booklet for their child. Interestingly, participation in Medair activities did increase the likelihood of mothers having a booklet and suggests that **Medair activities can have a positive effect on vaccine booklet maintenance in future programming.**

The percentage of children in the sample vaccinated for measles has decline by about -18 ppt for Syrian children and about -8 ppt for Lebanese children. The 2020 values for measles coverage are slightly more than half of the sample (58%). For Polio, the situation is better with about three quarters (74.1%)of Syrian children in 2020 having polio coverage and about 80% of Lebanese. DPT vaccination coverage is a similar percentage – about 70% of Syrians and 80% of Lebanese. In theory, this might be due to the COVID-19 restrictions, but that should have showed consistently lower rates for all vaccines if that were the main factor. However, **while measles vaccination coverage has declined since 2016, both Polio and DPT have seen small increases.**

There has been a gradual increase in overall vaccine coverage since 2018. The percentage of Syrian children with all vaccines has increased by 10 ppt while it has increased by 25 ppt for Lebanese children. The average number of vaccines per child has also increased to 9.8 per Syrian child in 2020 and 12.0 per Lebanese child. There is a substantial difference by nationality where Lebanese children were more likely to have all vaccines compared to Syrian (23.5 ppt difference. Mothers who could not read or write were much less likely to have all age-appropriate vaccines (-12.3 ppt).

Psycho-Social Support Services and Access

While a substantive majority of respondents throughout the entire project cycle cited needing PSS support (usually around 75%) only a small fraction made use of PSS services. Knowledge of PSS services and where to locate them is low and actually accessing them is relatively rare. When respondents do think of PSS sources of support, they are more likely to think of informal sources such as family and friends than trained service providers. **Participation in Medair activities makes a big difference on all PSS factors – services available, where to go, using trained service providers, and actually accessing PSS support.**

The PSS services assessed in the survey were support groups, counselling, medicine, and social workers. **By 2020, about one-third of respondents could name at least one PSS service available**. This percentage increased since 2016 for Syrians (14 ppt) although it remained stable for Lebanese. By far the most commonly cited service was support groups followed distantly by counselling. **When specifically asking about whether they had access PSS support (as opposed to discussing PSS), about half of the respondents reported having accessed PSS support in 2020**. However, this PSS support was primarily from informal sources such as family, friends, or religious figures. **Only 2.1% of Syrians and 5.0% of Lebanese in 2020 reported accessing PSS from a specialized service.** This percentage has held stable across the project cycle suggesting that behaviour has not changed.

Social Factors and Programming

Among the six social factors, nationality has the most influence in the distribution of responses. Vulnerable Lebanese have consistently better responses on health knowledge and behaviour across the majority of the indicators. **The effect is large with often a 15-25 ppt difference between Syrian response percentages and Lebanese response percentages**. In many indicators, the patterns across the cycle were that there would be an increase in Syrian behaviour from 2016 while with Lebanese respondents the patterns stayed more consistent. **Because Lebanese response percentages were higher to begin with, this had an effect of often bringing Syrian responses closer to Lebanese responses by 2020**.

The second most influential social factor, after nationality, is whether the respondent can read or write. **Women who cannot read or write are less likely to have appropriate health knowledge or behaviours – especially those elements that have to do with management or maintenance**. Early marriage was associated with literacy but was not influential by itself. Living inside or outside the catchment area affected access to Medair SDCs, but not access to health options in general.

SDCs as a whole have played a significant role in the provision of health services – especially to vulnerable populations. Syrians have greater needs in health knowledge and behaviour than Lebanese and they rely more on the SDCs to access these services. This has led to reduced strain on the other

elements in the formal health system and helped improve access to services. There is enough consistent variation among the SDC response percentages to suggest it may be useful to develop a tool specifically to assess individual capacities of SDCs.

Participation in Medair activities influenced responses in the use of Medair SDCs, RH access, PSS, and family planning. **Given that PSS, FP, and STI are substantive gaps in the logframe accomplishments, it would be worthwhile in future programming to continue to emphasize these activitie**s.

Summary Observations

Overall, there has been progress on most indicators across the project cycle. Of the 47 indicators profiled, 25 show positive changes and only 2 show a negative change (measles coverage and staying in hospital more than 24 hours). The remainder are stable or volatile.

However, even though there has been progress, in many of the themes, response rates are not yet close to a potential maximum and there are some areas that could be addressed in future programming including:

There have been improvements in **health seeking behaviour and declines in incidence of ARI, Diarrhoea and NCD** which suggests positive improvements in the general WASH environment as well as improved lifestyle environment. Treatment behaviour has stayed constant throughout the cycle, and there are positive increases in ORS usage. There is an **unusual increase in the use of painkillers and antihistamines for ARI** treatment.

Reproductive health knowledge has increased over the cycle, but this is largely focused on ANC and PNC. Most respondents **do not consider FP or STI and most know of only one place to access RH services**. Family planning practices have improved but there are still gaps in terms of **consultation, contraceptive use, or birth spacing practices.**

While overall the birth management cycle is strong, there are still **gaps in systemic capacities of the health system to meet the demand** because there are fewer options for birth. Because of this, there are problematic patterns in **staying in hospital, the use of C-sections, maternal mortality, and appropriately frequent PNC care**.

Among vaccinations, there is a fundamental under-reporting of vaccine coverage due to the low levels of **vaccine booklet management**. **The decline in measles coverage and low percentages of age-appropriate vaccines** are gaps to address further. Programming around increased quality of management of the vaccine booklets may have an outsize effect on vaccination coverage and should be considered in future programming.

In terms of percent of respondents using services, the biggest shortfall is for **accessing PSS support**. PSS knowledge about services or locations are not well known and very **few mothers access PSS services** from trained service providers even though three quarters of the respondents reported some type of PSS need. Mothers still prefer to access whatever PSS support they do receive from informal sources and are **not accustomed to using trained service providers** either because of familiarity or because of stigma or taboo.

Recommendations

Throughout the analysis of the findings and conclusions, a number of elements have been highlighted for potential considerations in future programming. However, in any evaluation, too many recommendations can become the functional equivalent of no recommendations. Too many items for consideration can inhibit focus on any particular item. To this end, the evaluation presents only nine recommendations although the Lebanon office should feel free to consider additional recommendations

that may be relevant to their programming context. The recommendations are organized to respond to potential future programming.

Recommendation 1:Adult Literacy. Given the prevalence of literacy as an influencer on patterns, consider integrating into future programming additional investment in activities around the promotion of adult literacy for mothers given the effect that literacy has on health behaviours and knowledge. Alternatively, for those variables with significant differences between literacy levels, consider developing materials or training methods which are more friendly for non-literate women.

Recommendation 2: SDC Assessment. Consider development an in-depth SDC assessment tool to provide additional detail on the functioning of individual SDCs. There is enough variation among the SDCs even when controlling for socio-demographic factors that follow up assessing individual SDC performances and quality would be a useful next step for providing increased quality of service.

Recommendation 3: Birth Institutional Capacity. Consider programming that seeks to strengthen the institutional capacity of the formal hospitals and clinics for birth delivery demands. Increasing the capacity for absorption should be accompanied by awareness raising activities directed to doctors and medical officials on three items:

    i)   increasing length of stay in hospital after birth,

    ii)   decreasing reliance on C-sections, and

    iii)   assessments of conditions that may be contributing to maternal mortality.

Recommendation 4: SDC Post-Delivery Support. In combination with recommendation 3, to improve the SDC support to mothers post-delivery, consider adding support to SDC capacity to carry out.

    i)   Registration case management support to mothers whose children are either: a) 0-6 months, or b) were born in Syria, to help them acquire birth certification.

    ii)   Increasing capacity of SDCs to provide sufficiently frequent PNC visits and care to mothers within the first 40 days of delivery.

    iii)   Breastfeeding training provided by SDCs to focus on increasing the frequency of 24-hour exclusivity during the first six months.

Recommendation 5: Family Planning and SBC. Adjust SBCC activities around family planning practices to take into account that knowledge of risks does not appear to lead to behaviour change and that reasons for not using contraception are not likely associated with preference for more children. These adjustments should provide special attention to activities that encourage:

    i)   increased consultation on FP with trained providers,

    ii)   increased use of modern contraceptive practices,

    iii)   increased knowledge of appropriate contraceptive practice and birth spacing needs.

Recommendation 6: Vaccination Coverage. To strengthen vaccination coverage, consider integrating into new activities two areas of focus:

    i)   a campaign for mass vaccination of measles,

    ii)   increased training to mothers – especially ones who cannot read or write – on care and management of vaccine booklets.

    iii)   Strengthening the vaccination tracking system to include SDC nurses calling the mother of the child to remind her of an appointment when a child is due to receive a specific vaccine.

Recommendation 7: ARI and Painkillers. Adjust SBCC activities related to treatment of ARI to take into account the increased use of painkillers for ARI treatment.

Recommendation 8: PSS Services. Strengthen PSS services programming support through two mechanisms:

i)   strengthening the capacity of the informal sources of support which are the preferred option of mothers through peer-to-peer learning or lay-person capacity strengthening to provide basic tools to informal sources for adequate PSS support.

ii)   increasing the utilization of trained service providers for PSS support.

Recommendation 9: Survey Reliability. Adjust the survey questions for future programming to reduce reliability issues that come from either questions that may confuse respondents or which they may not have the knowledge to know. This includes:

i)   Tracking medicine usage and the distinctions between antibiotics, antihistamines, or painkillers

ii)   Replacing 'satisfaction' questions for RH and PSS services with a checklist of actions that were or were not done with the respondent when they accessed the service.

iii)   Adding specific questions regarding comfort and access to FP and STI services rather than general RH services.

iv)   Asking for medical reasons for actions that may be beyond the respondents' knowledge (such as cause of death, reasons for C-sections, among others)

2020 Logframe Indicator Summary[1]

Dimension	Indicators	Syrian Refugees	Vulnerable Lebanese
Socio-demographic info	1. % of mothers of children ages under 5 years who got married before the age of 18 years (early marriage)	44.9	14.9
	2. % of mothers of children ages under 5 years who do not know how to write and read	44.8	4.9
	% of households (HH) with a crowdedness index above 1.5	NA	NA
Health care access general	3. % of mothers of children aged under 5 years of age in project area who went to qualified health services when they needed medical services	55.3	70.5
	4. % of mothers of children aged under 5 years of age in project who visited any Medair supported SDC during the 12 months prior to the survey	79.0	60.3
Reproductive Health (RH) services	5. % Women in the targeted communities who correctly identify available RH services	91.5	90.0
	6. % WGMB in the targeted communities who correctly report where to access RH services	91.1	89.5
	7. % Women in the targeted communities who report that they would be comfortable and able to access these (RH) services as needed	93.5 89.5	96.3 95.8
	8. % of mothers of children under 5 years who report accessing RH services in the 6 months prior to the survey	46.5	45.2
	9. % of mothers of children under 5 years receiving RH services who report satisfaction with support provided	96.8	99.5
ANC visits	10. % of mothers of children under two years of age who had at least 4 comprehensive antenatal visits when they were pregnant with their youngest child	71.7	93.6
	11. % mothers of children aged 0-23 months who had their first ANC visit within the first 3 months of pregnancy	90.0	97.2
	12. % mothers of children aged 0-23 months who had their last ANC visit less than 1 month before delivery	81.8	92.4
Delivery	13. % of mothers of children under 5 years who delivered their youngest child at hospital	95.6	99.8
	14. % of mothers of children under 5 years who delivered by caesarean section	29.2	54.7
	15. % of mothers of children aged 0-23 months who received a health booklet during their stay at hospital	80.0	97.3
	16. % of mothers of children aged 0-23 months who stayed at 24h in the hospital after delivery	13.9	32.4
Postnatal Care (PNC)	17. % of mothers of children under two years of age who received a post-partum visit from an appropriate trained health worker within two weeks after birth of their youngest child	80.1	84.4
	18. % of children under two years of age who were examined by an appropriately trained health worker 3 days after delivery	3.2	4.5
	19. % of mothers of children under two years of age who received at least 3 post-partum visits within 40 days after delivery	3.1	8.9
(Exclusive) Breastfeeding	20. % of infants 0-6 months who are exclusively breastfed (calculation method 1)	10.5	7.8
	21. % of infants 0-6 months who are exclusively breastfed (calculation method 2)	39.7	39.5
	22. % of mothers of children 7-23 months who breastfed their child within 1 hour after delivery	93.9	90.3
Family Planning (FP)	23. % of mothers of children under 5 years who report discussing FP with a trained service provider in the 12 months preceding the survey	8.6	12.5

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[1] The multi-year database is found in Annex 5

	24. % of mothers of children 0-23 months who are using a modern contraceptive method	16.7	53.9
	25. % of mothers of children 0-23 months who know at least one risk of getting pregnant within 2 years of last delivery	72.8	84.8
	26. % of women of children 0-23 months who know what the recommended spacing is for births.	30.0	41.8
Vaccinations	27. % of children aged 12 months- 5 years who are vaccinated for measles in clinics' coverage area	54.7	67.3
	28. % of children aged 1- 5 years who are vaccinated for polio in clinics' coverage area	74.1	81.6
	29. % of children aged 1- 5 years who are vaccinated for Diphtheria and Pertussis and Tetanus (DPT) in clinics coverage area	70.5	81.0
	30. % of children age 12-23 months who received age-appropriate vaccination at time of survey	22.7	46.2
Treatment of sick child	31. % of children under 5 years that had fast or difficult breathing in the last 2 weeks	6.0	2.3
	32. % of children under 5 years with fast or difficult breathing for whom advice or treatment was sought after more than 24h of fast or difficult breathing, in the last 2 weeks	18.4	10.9
Treatment of children with Acute Respiratory Infection (ARI)	33. % of children under 5 years with fast or difficult breathing for whom advice or treatment was sought from an appropriate health facility or provider in the last 2 weeks	72.9	93.5
	34. % of children under 5 years with fast or difficult breathing or cough by type of treatment in the last 2 weeks (inclusive of antibiotics)	See Results	See Results
Treatment of children with diarrhoea	35. % of children under 5 years with diarrhoea receiving ORS and zinc supplementation	49.1 17.3	58.1 9.3
Prevalence of diarrhoea	36. % of children under 5 years that experienced diarrhoea in the last 2 weeks	22.1	11.0
Non-Communicable Diseases (NCD)	37. % of mothers of children under 5 years who reported having at least one HH member with NCD	13.8	13.1
	38. % of women who know 2 or more ways to reduce the risk of NCDs	35.4	65.4
Psycho Social Support (PSS) services	39. % women in the targeted communities who correctly identify available PSS services	32.3.	33.4
	40. % women in the targeted communities who correctly report where to access PSS services	44.1	43.2
	41. % of mothers of children under 5 years who report discussing PSS with a trained service provider in the 12 months preceding the survey	16.0	12.6
	42. % women in the targeted communities who report that they would be comfortable and able to access these (PSS) services as needed	67.3 53.1	74.5 68.8
	43. % of mothers of children under 5 years who report accessing PSS support services in the 6 months prior to the survey	2.1	5.0
	44. % of mothers of children under 5 years receiving PSS services who report satisfaction with support provided	96	94.1
Child registration	45. % of children under 5 years officially registered in their country (for Syrians)	5.5	NA
	46. % of children under 5 years without birth certificate	6.1	NA
Mortality related to pregnancy	47. % of women's sisters who died due to problems related to pregnancy	1.1	0.9

2   Introduction and Background

2.1   Context

The Syrian refugee crisis is considered to be one of the worst humanitarian crises since World War II and Lebanon continues to host one of the highest number of displaced persons per capita in the world. As of the end of 2019, estimates place the number of displaced persons hosted in Lebanon as more than 1.5 million[2] of which a third live in the Bekaa Valley.[3] The protracted nature of the Syrian conflict has meant that since 2014, the refugee population in Lebanon has been relatively stable since 2014. This population, in combination with nearly 1.5 million Lebanese whose vulnerabilities have been exacerbated by the crisis as well as more recent events such as the COVID-19 pandemic and the explosion of Port Beirut, has strained the capacities of political, economic, and social systems to respond to the needs of these affected populations – including for healthcare. This has led to complicated living conditions in some of the settlements, exacerbated by poor sanitation and hygiene, which can negatively affect the overall public health situation and risking the outbreaks of communicable diseases – including respiratory diseases or intestinal infections.

To help respond to this crisis, the Ministry of Social Affairs (MOSA) and the Ministry of Public Health (MoPH) have developed a multi-pronged approach of establishing community primary health centres, subsidizing the costs of health care, and supporting community outreach and awareness raising. Previously, the MOSA developed Social Development Centres (SDCs) intended to improve the access to primary health care (PHC) service for both Syrian refugees and vulnerable host communities. However, these were often limited in function due to lack of funds and capacities. The MOSA support is intended to include providing access to quality and gender-responsive primary health care services for mothers with children under five years of age in fields such as child and maternal health (MCH), reproductive health, non- communicable diseases, and mental health services.

In Lebanon, health services and medications, including women's health and vaccinations for children, are subsidized by external health actors such as Medair for the most socially disadvantaged, including for Syrian refugees, and consultation fees are subsidized. According to the health project description in 2016, this is based on a Flat Fee Model (FFM) as part of the strategies of the Ministry of Public Health (MoPH). The FFM was piloted by the International Medical Corps and Premiere Urgence Interationale to provide support to PHCs as part of the Lebanon Crisis Response Plan (2017-2020). However, access to this model is still relatively low with only about 12% of the 1439 PHCs in Lebanon offering subsidized services. Thus, the SDCs supported by the MOSA can play an important role in providing access to affordable healthcare. In addition to the health centres, an established community outreach programme relying on two groups of community volunteers provide broader household support and awareness raising. Community Health Volunteers (CHVs) in the SDC catchment areas deliver a community health promotion package on relevant health topics including family planning, exclusive breastfeeding, MCH, early marriage prevention, and referral systems. Community midwives provide antenatal care, post-natal care, and family planning. Both groups carry out household visits or community outreach campaigns throughout the SDC catchment areas intending to target both refugees and vulnerable host communities.

2.2   Project Description and Indicators

Since 2014, Medair has been supporting the MOSA in the health centres of the SDCs and the CHVs and community midwives in their community outreach work. Medair supports the clinics through the provision of human resources, medicines, equipment, capacity building and supportive supervision to each of the clinics. Since 2014, Medair has supported seven different SDCs throughout the years and in 2020, Medair currently continues to support five SDCs in the Bekaa Valley – Brital, Talia, Joub Jannine, Marj, and Kabelias (Qabb Elias). Funding to support the Medair health project comes from an

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[2] 51% women and 54% children
[3] UNHCR Data Portal, November 2019

array of donors, of which the EU Regional Trust Fund in Response to the Syrian Crisis (EU-MADA) and Global Affairs Canada (GAC) are the primary donors. The current funding cycle extends from 2016-2021. Implementation in the current 2020 year has been negatively affected by the COVID-19 pandemic and protests starting from October.

The current health project activities focus on supporting three main objectives:
1. Improving access of mothers with children under five to primary health care services
2. Improve the quality of health care services provided by the MOSA SDCs.
3. Increase the health, nutrition, and hygiene awareness and practice among mothers with children under five.

Key project areas under these objectives include supporting health behaviours among mothers including:
1. Health seeking behaviour.
2. Diarrhoea and respiratory tract infection management for children
3. Vaccinations
4. Reproductive health managements
5. Breastfeeding practices
6. Access to reproductive and psychosocial services.

To track performance against these outcomes and project areas, a project logical framework has been developed with 48 indicators[4] across 16 dimensions. Table 1 describes the project indicators and dimensions.

Table 1: Project Indicators by Programme Area

Dimension	Indicators
Socio-demographic info	1. % of mothers of children ages under 5 years who got married before the age of 18 years (early marriage)
	2. % of mothers of children ages under 5 years who do not know how to write and read
	% of households (HH) with a crowdedness index above 1.5
Health care access general	3. % of mothers of children aged under 5 years of age in project area who went to qualified health services when they needed medical services
	4. % of mothers of children aged under 5 years of age in project who visited any Medair supported SDC during the 12 months prior to the survey
Reproductive Health (RH) services	5. % Women in the targeted communities who correctly identify available RH services
	6. % WGMB in the targeted communities who correctly report where to access RH services
	7. % Women in the targeted communities who report that they would be comfortable and able to access these (RH) services as needed
	8. % of mothers of children under 5 years who report accessing RH services in the 6 months prior to the survey
	9. % of mothers of children under 5 years receiving RH services who report satisfaction with support provided
ANC visits	10. % of mothers of children under two years of age who had at least 4 comprehensive antenatal visits when they were pregnant with their youngest child
	11. % mothers of children aged 0-23 months who had their first ANC visit within the first 3 months of pregnancy
	12. % mothers of children aged 0-23 months who had their last ANC visit less than 1 month before delivery
Delivery	13. % of mothers of children under 5 years who delivered their youngest child at hospital
	14. % of mothers of children under 5 years who delivered by caesarean section
	15. % of mothers of children aged 0-23 months who received a health booklet during their stay at hospital
	16. % of mothers of children aged 0-23 months who stayed at 24h in the hospital after delivery
Postnatal Care (PNC)	17. % of mothers of children under two years of age who received a post-partum visit from an appropriate trained health worker within two weeks after birth of their youngest child

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[4] One indicator on crowdedness index is not reported on in the annual reports

	18. % of children under two years of age who were examined by an appropriately trained health worker 3 days after delivery
	19. % of mothers of children under two years of age who received at least 3 post-partum visits within 40 days after delivery
(Exclusive) Breastfeeding	20. % of infants 0-6 months who are exclusively breastfed (calculation method 1)
	21. % of infants 0-6 months who are exclusively breastfed (calculation method 2)
	22. % of mothers of children 7-23 months who breastfed their child within 1 hour after delivery
Family Planning (FP)	23. % of mothers of children under 5 years who report discussing FP with a trained service provider in the 12 months preceding the survey
	24. % of mothers of children 0-23 months who are using a modern contraceptive method
	25. % of mothers of children 0-23 months who know at least one risk of getting pregnant within 2 years of last delivery
	26. % of women of children 0-23 months who know what the recommended spacing is for births.
Vaccinations	27. % of children aged 12 months- 5 years who are vaccinated for measles in clinics' coverage area
	28. % of children aged 1- 5 years who are vaccinated for polio in clinics' coverage area
	29. % of children aged 1- 5 years who are vaccinated for Diphtheria and Pertussis and Tetanus (DPT) in clinics coverage area
	30. % of children age 12-23 months who received age-appropriate vaccination at time of survey
Treatment of sick child	31. % of children under 5 years that had fast or difficult breathing in the last 2 weeks
	32. % of children under 5 years with fast or difficult breathing for whom advice or treatment was sought after more than 24h of fast or difficult breathing, in the last 2 weeks
Treatment of children with Acute Respiratory Infection (ARI)	33. % of children under 5 years with fast or difficult breathing for whom advice or treatment was sought from an appropriate health facility or provider in the last 2 weeks
	34. % of children under 5 years with fast or difficult breathing or cough by type of treatment in the last 2 weeks (inclusive of antibiotics)
Treatment of children with diarrhoea	35. % of children under 5 years with diarrhoea receiving ORS and zinc supplementation
Prevalence of diarrhoea	36. % of children under 5 years that experienced diarrhoea in the last 2 weeks
Non-Communicable Diseases (NCD)	37. % of mothers of children under 5 years who reported having at least one HH member with NCD
	38. % of women who know 2 or more ways to reduce the risk of NCDs
Psycho Social Support (PSS) services	39. % women in the targeted communities who correctly identify available PSS services
	40. % women in the targeted communities who correctly report where to access PSS services
	41. % of mothers of children under 5 years who report discussing PSS with a trained service provider in the 12 months preceding the survey
	42. % women in the targeted communities who report that they would be comfortable and able to access these (PSS) services as needed
	43. % of mothers of children under 5 years who report accessing PSS support services in the 6 months prior to the survey
	44. % of mothers of children under 5 years receiving PSS services who report satisfaction with support provided
Child registration	45. % of children under 5 years officially registered in their country (for Syrians)
	46. % of children under 5 years without birth certificate
Mortality related to pregnancy	47. % of women's sisters who died due to problems related to pregnancy

To track performance against these indicators, a standardized annual Knowledge, Practice, and Coverage (KPC) household survey is applied to a random sample of mothers – both Syrian and Lebanese – in the Medair supported SDC project areas. Medair conducted its first KPC survey in November 2015 and has repeated the survey each year. The survey data is used to not only track project indicator progress but also to provide evidence for the MOSA and MOPH regarding the MCH situation in the Bekaa valley and further inform future decision-making, advocacy, and programming.

Each year a report is generated to profile the contemporary annual state of the 48 indicators, compare against previous years, and based on the findings and multi-year comparisons, provide suggestions for adaptations or new programming approaches.

3 Methodology

3.1 Overview

This is the fifth year of the current project cycle and this exercise is intended to be a summative report on the targeted health indicators with suggestions for future programming engagement. The purpose the analysis is two-fold:

1. Analyse and report on the data collected from the KPC survey for 2020.
2. Carry out a comparative analysis against the earlier datasets from 2016-2020 to identify significant trends.
3. Propose suggestions for future programming implications.

As part of analysis, supplemental document review of available Medair monitoring and reporting was integrated into the report. However, the primary information source is the KPC multi-year data. The TOR for the current assessment is found in Annex 1.

3.2 KPC Survey

The KPC is an already established system for collecting the data against the outcome indicators and has been applied in a fairly consistent manner across the five years under review.

The sample sizes and sampling areas did shift from year to year somewhat depending on the particular interests at any one period of time and the survey questionnaire did have specific demographic questions added or excluded from year to year. However, the core questions in the survey remained largely consistent from year to year and can be used to assess with reasonable confidence changes over time.

Each year demographic information was collected on the respondents. Across all the years, nationality of the respondent, which SDC catchment area they were associated with, level of education, and age at which they were married was collected. Other demographic variables were added or excluded from year to year. In 2020, two additional demographic variables were included: a) whether they had participated in Medair activities, and b) whether they lived within an SDC catchment area (within five kilometres of an SDC) or were outside the catchment area. The logic of the latter is important because those living outside the catchment areas can serve as a proxy 'control group' to see whether proximity to an SDC has influenced health behaviours.

3.3 Data Collection and Sampling

In all the years, the data collection and sampling processes followed a standardized procedure. The 2020 data was collected during October 2020. A two-stage cluster sampling approach was employed to achieve a 95% confidence level and a 5% margin of error to the total population. In 2018, the survey sample was increased to be able to provide a 5% margin of error to the SDC level. The number of respondents in the survey – and thus the margin of error – changed year to year. The following table summarizes the sample size and subsequent margin of error for each year. The margin of error is for the entire population, but because each year Lebanese and Syrian data was disaggregated, the table also includes the margin of error for each of these two populations.[5]

Table 2: Sample Size and Margin of Error for total populations by Year and Nationality

Year	Sample Size	Margin of Error[6]

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[5] The table profiles the sample size AFTER data cleaning, includes only mothers for consistency, and the margin of error is for each population and sub-population as a whole.
[6] Margin of Error rounded to nearest .1

	Total	Syrian	Lebanese	Total	Syrian	Lebanese
2016	753	367	386	3.6	5.1	5.0
2017	1298	634	664	2.7	3.9	3.8
2018	2233	1482	751	2.1	2.5	3.6
2019	2287	1529	758	2.1	2.5	3.6
2020	2685	1767	918	1.9	2.3	3.2

The sampling approach is based on IAMP 63 data. For both the Syrian and Lebanese samples, the number of both types of households living within the coverage area of the five Medair SDCs disaggregated by cluster to generate a cumulative population list. Syrian refugees lived almost exclusively in the Informal Tended Settlements while the Lebanese usually lived within the neighbouring communities – but both were within the SDC coverage areas. Based on the total household population and the required sample sizes, an interval was calculated for the clusters and sampling used an interval approach. In 2020, 30 respondents were selected per cluster from 59 Syrian clusters and 31 Lebanese clusters.

To ensure consistency in the data collection, 55 enumerators were contracted and supervised by Medair field staff. A four-day training was carried out in two batches to cover an orientation to the KPC survey, project activities and areas of intervention. Data collection was carried out throughout the month of October, supervised by Medair staff. Data was collected on tables using Open Data Kit (ODK) technology. The COVID-19 regulations required extra precautions in 2020 including enumerators using personal protection equipment and practicing social distancing during interviews.

3.4 Data Cleaning and Analysis

The survey data from the ODK surveys was then shared with the consultant as excel files. The 2020 data and the previous year data sets were shared and then compiled by the consultant into SPSS. Data cleaning for 2020 and the other data sets was carried out using the same criteria described in earlier project reports: including only caregivers and eliminating surveys that were completed in a suspiciously low amount of time (cut-off 11 minutes). The latter to control for the possibility of either enumerators just filling in the surveys themselves or respondents not answering with forethought.

Because each year the survey included different questions or were asked in different ways, the final multi-year data set required adjusting and aligning the comparable questions with the 2020 survey structure. Data analysis was carried out by the external consultant in SPSS[7] based upon the finalized excel spreadsheets.

The initial analysis of each of the indicators used the same process described in earlier annual survey reports to ensure consistency – as much as possible – across multiple years in the indicator values. The Analysis framework with indicator definitions and calculations is found in Annex 2.

Disaggregation by demographic variables. For both the multi-year and the 2020 dataset analysis, the survey results for each indicator were reported disaggregated by nationality – differentiating between the Syrian refugee mothers and the vulnerable Lebanese host community mothers. For 2020, analysis was also carried out to ascertain the degree to which other demographic variables were influencing the patterns of response. This was to help determine whether certain characteristics could be identified concerning whether they contributed to improved health behaviour outcomes. In particular, participation in Medair community awareness activities was of interest to determine the degree of influence these social change communication activities influenced outcomes. During the subsequent analysis, multivariate analysis was carried out among these factors to control for potential confounding interactions. Where these are relevant, they are reported. The variable profiled are:
1. SDC
2. Location within Catchment Area

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[7] The term SPSS is not normally spelled out any more than Excel is spelled out. However, it stands for Statistical Package for Social Sciences (SPSS).

3. Nationality
4. Whether married before age 18
5. Whether can read or write
6. Whether participated in Medair activities

Demographic Summary: For the 2020 dataset, the following table summarizes the main demographic distributions of the sample. characteristics were found among the demographic variables.

- **Nationality**: 62.4% Syrian
- **Married under age 18**: 34.7% (Among Syrians, 44.9% married early compared to only 14.7% among Lebanese)
- **Cannot read or write**: 31.4% (Among Syrians, 45% could not read or write compared to only 5.4% Lebanese).
- **Lives within a Catchment**: 88.9%
- **Participated in Medair Activities**: 38.7% (44% among Syrians)
- **SDC Representation**:
    - Marj – 19.1%
    - Britel – 18.9%
    - Joub Jannine – 21%
    - Kabelias – 20%
    - Talia – 21%

3.5   Limitations to the Study

Generally, limitations to a study can be classified into one of three categories: Data collection, methodology, and logframe. Overall, the data collection process went relatively smoothly, and the diversity of tools and approaches employed provided generally high-quality insights into the project activities. Nevertheless, some potential limitations should be recognized:

1. The timeline for implementing the data collection coincided with the COVID-19 pandemic. The pandemic not only led to the suspension of many planned project activities, but also presented challenges for the data enumerators and the trainings that could be carried out with them. This was partially ameliorated using remote communication processes and the involvement of the Medair staff to help with data collection processes to ensure consistency but did present constraints.
2. Some of the indicators in the logframe do not adequately capture the results of the project for three reasons: a) imbalanced attention to project components (too many indicators targeting a minor component in the project); an absence of indicators to measure specific contributions of the project (such as support to SDCs), and c) flawed indicator values – either through inconsistent calculations of the indicator values or the use of measures which may lead to under-reporting of true values. Vaccination coverage is one example of this limitation.
3. Some of the indicators relied on the assumption that the mothers surveyed would be familiar with technical health information – for example, being able to understand the difference between medicines such as antibiotics, antihistamines, or painkillers. This *could* affect reliability year to year as respondents may confuse these categories although this cannot be tested with the current survey data.
4. The fluid nature of households and their ability to make choices both among which SDC to attend or whether to attend other options, creates challenges for tracking whether specific SDCs or health options are the ones that are most influencing reported health behaviour.
5. Relying on respondent self-report for knowledge is fairly reliable but relying on respondent self-report for behaviour, while necessary, comes with the limitation that respondents may not always be truthful about their behaviour – especially when it comes to factors that may be affected by social desirability bias (such as breastfeeding or accessing STI).
6. The survey and sampling were different in 2016 and 2018 compared to the other years. In 2016, the survey questions were more basic (for example, only 10 vaccinations were followed compared to 15 in the other years). In 2018, the sampling frame was much bigger – covering

the entire Bekaa Valley rather than the Medair SDC areas. This was because it was intended to also be part of an assessment. Practically, this meant that some of the reported values in 2016 and 2018 are different from the other years.

7. The length of the questionnaire is extensive to measure all the required variables which can lead to respondent fatigue and unreliable reporting – especially for questions in the latter half of the survey.

4   Findings

4.1   How to Interpret the findings

4.1.1   Overview

The results are divided into two sections. The first section, results by dimension, describes the values of each of the 48 indicators. The second section describes the results of the composite measures analysis. Because this is a summative report of the entire five-year cycle, for each indicator, the presentation of the 2020 data is combined with an assessment of the changes in the indicators across the five-year period. **There are five considerations that should be taken into account when reading the results section**.

Percent versus Percentage Points. All of the indicators are presented as "*percent of respondents who do....xxx*". When comparing between years or types of demographic variables, changes will be expressed as changes in percentage points (ppt) rather than percent change. This is important to consider when interpreting changes. For example, if a survey found that 5% of mothers in one year responded yes, but in year 2, this had increased to 10% of the mothers. The percent change is 100% (doubling), but the percentage point increase is 5 ppt. (increase of five percentage points from 5 to 10). All comparisons are done as the latter.

Margin of Error and Significant Change. An important reminder when reviewing multiple years or comparing across demographics is that small changes in indicator values should not be overly emphasized. Small changes in percentages that lie within the margin of error (or confidence interval) have to be assumed too not be statistically different. Margin of error and statistical significance is reported for each indicator. The margin of error varies depending on the sample size of each sub-population analysed. However, as a general rule, any values that are less than 5 ppt apart should not be considered to be statistically significant. Table 3 below provides the precise ppr definitions required for the confidence intervals.

Disaggregation by Nationality. The primary data for each indicator is NOT presented as a single total for the whole population but rather disaggregated by Syrians and Lebanese. This is done not only because it is a donor requirement, but because the effects of nationality are massive. In almost all indicators, vulnerable Lebanese have substantively better health behaviour than Syrian refugees. Presenting the data as a single total would mask the true situation among Syrian refugees and under-report the conditions among vulnerable Lebanese.

Disaggregation and Presentation of demographic variables. All of the demographic variables (nationality, catchment location, SDC, literacy, marriage age, and participation in Medair activities) were assessed against each indicator. These cross-tabulations can be found in Annex 3. **Annex 3 includes excel files with graphs and frequency distributions on the relevant indicators.**

However, for reasons of readability, with the exception of nationality, these factors will ONLY be discussed IF they had a significant influence on the patterns of the responses. For example, if the percent of respondents reporting knowing what types of RH services are available is within the margin of error across all five SDCs, then that is merely referenced as "*SDC did not affect patterns of response*" rather than presenting all the data. This is also intended to reduce misleading interpretations. When demographic variables ARE significant, these are cited as percentage point difference. For example, if Syrians had 25% of respondents reporting *yes* on some factor while Lebanese had 40% reporting on the

same factor – this would be presented as "*Nationality was statistically significant and made a difference of 15 ppt*" (the difference between 25% and 40%). As a general rule, **demographic factors that have an influence of at least 8 ppt can be considered to have a strong influence**.

Multi-Year Patterns. The comparison across individual years was generated from the multi-year SPSS database. These tables can be found in the accompanying SPSS outputs. For readability, in the narrative analysis, first and last values will be reported plus one of four judgements:

- **Increasing**: Denotes steady year to year increase in the percentage of respondents on an indicator
- **Decreasing**: Denotes a steady year to year decline in the percentage of respondents on an indicator.
- **Stable**: Denotes variations year to year that all within the overall margin of error. This likely means no real changes in this indicator over time.
- **Volatile**: Denotes variations year to year that have no common pattern, but which exceed the margin of error. This likely means a survey reliability issue with a question phrased that confuses respondents or which assumes a level of knowledge they do not possess. It can also occur if questions are rephrased from year to year – although this does not appear to the case in this context. New questions have been added from year to year of course.

Ideally, indicator values are either increasing or decreasing (depending on the indicator in question). Stable patterns would suggest that there has been limited impact. **Volatile patterns cannot be used for conclusions while stable patterns cannot be used to claim a change.**

4.1.2   Confidence Intervals and Interpreting Results

For the following sections related to the bi-lateral comparisons of demographics, the following table provides a guide to the percentage point difference required before conclusions regarding statistical significance can be made. **For readability purposes, these confidence intervals are not listed each time as that would make the report cumbersome to interpret important findings**. If the reader would like to know the confidence intervals for values cited, this can be achieved by adding and subtracting the confidence interval from the indicator values cited throughout the report. Summary statistics are available in the accompanying SPSS annexes.

Table 3: Margin of Error and Percentage Point Difference Required for Significance

2020 Demographic	Margin of Error Variable 1	Margin of Error Variable 2	Therefore, values must be at least this far apart for significance…
Nationality	Syrian: 2.3	Lebanese: 3.2	**5.5**
SDC	All: 4.3	All: 4.3	**8.6**
Catchment	Inside: 2.0	Outside: 5.6	**7.6**
Literacy	Cannot Read: 3.4	Can Read: 2.3	**5.7**
Marriage	Under 18: 3.2	Over 18: 2.3	**5.5**
Participation	Yes: 3.0	No: 2.4	**5.4**
2020 Indicator Disaggregation[8]			
Mothers with children aged 0-6 months	Syrian: 4.9	Lebanese: 8.6	**13.5**
Mothers with Children under 24 months	Syrian: 2.9	Lebanese: 4.8	**7.7**

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[8] Some of the Logframe Indicators specify for mothers with children under 24 months or with children 0-6 months. These values will have different confidence intervals from the entire sample.

Mothers with children over 24 months[9]	Syrian: 3.9	Lebanese: 4.3	8.2
Multi-Year Demographic[10]	**Syrian Margin of Error**	**Lebanese Margin of Error**	**Therefore, values must be at least this far apart in any given year for significance…**
2016	5.1	5.0	**10.1**
2017	3.9	3.8	**7.7**
2018	2.5	3.5	**6.0**
2019	2.5	3.5	**6.0**
2020	2.3	3.2	**5.5**

When tracking progress within years between Lebanese and Syrians, the respective indicator values must be as far apart as the values in the last column. When tracking changes over time for Syrians and Lebanese, the year-to-year differences must be greater the sum of their respective margins of error for the respective nationality.[11]

The following table reports the summary for all 2020 indicators and an assessment of their changes across the multi-year database. The findings also analyse the relative degree of influence of the demographic variables in 2020 to better understand the potential for future programming approaches tailored to specific populations or system needs.

4.2   Results by Dimension and Indicator

4.2.1   Vulnerability - Socio-Demographics Summary

The following table summarizes some of the common demographic variables in the 2020 sample.

Table 4: 2020 Dataset Demographic Summaries

Demographic	Syrian Refugees	Vulnerable Lebanese
Number	1767	918
Cannot read or write	44.8%	4.9%
Married under 18 years	44.9%	14.9%
Participated in Medair activities	44.1%	28.4%
Mean Age of Respondent	28.9	30.7
Mean Age when married	18.5	19.8
Mean number of children under 5	1.8	1.30
Mean age of youngest child (months)	19.8	26.6
Gender of youngest child	53% boys 47% girls	53.6% boys 46.3% girls
SDC Coverage Area		
Marj	20.4%	16.4%
Britel	12.2%	31.7%
Jannine Joub	21.9%	19.4%
Kabelias	23.7%	13.0%
Talia	21.7%	19.5%

The processes for data collection and the sample population have been maintained relatively constant across the years, allowing for comparisons among the years. Although small, all of these differences are statistically significant (except for gender of youngest child which is the same). **Syrian refugee mothers tended to be younger, to be married at an earlier age, have more children under five in**

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[9] There are more children UNDER 24 months than children OVER 24 months, so the Margin of Error is lower for the first group. However, there are more Lebanese mothers with children over 24 months compared to Lebanese mothers with children under 24 months – hence the reason that Lebanese mothers have a lower margin of error for older children.

[10] Due to the changes in sample size each year, the confidence lertervals for indicator values change depending on the year.

[11] For example, for Syrians, the change in values from 2016-2017 must be greater than 9 ppt for it to be significant.

the households, and whose youngest child was younger. Syrian mothers were also more likely to be unable to read or write, and to have participated in Medair activities. There is some statistical significance regarding distribution across the SDCs and nationality. All SDCs were equally represented overall, however, in Britel and Kabelias, there was a statistically significant difference in the relative percentages of Syrian and Lebanese in the sample. The other three SDCs were within the margin of error.

When examining across the multi-year datasets, the demographics held constant within the margin of error for each individual factor. In terms of analysis, this is good in the sense of being able to generalize better across years. However, it also reflects that **there has been relatively little change in social items such as literacy levels, or the number of children under five in the households**.[12]

Indicator 1: Percent of mothers who married before the age of 18 years.

Table 5: Percentage of Mothers Married Before 18

Nationality	2020 Indicator Value	2019 Value	2016 Value	Multi-Year Pattern
Syrian	44.9	45.4	43.4	Stable
Lebanese	14.9	22.2	22.3	Stable except for decline in 2020

Table 6: 2020 Demographics Comparison against early marriage

Demographic	Significance (Y/N)[13]	Percentage Point Difference[14]	Comment
Nationality		30	Significant difference
SDC		10.5	Most SDCs are in same range, but Britel is 10 ppt lower than the others. Kabelias highest
Catchment			Not significant
Literacy		13.3	Women who cannot read or write more likely to be married early
Marriage	NA	NA	
Participation		7.3	Technically significant, but misleading as participation in Medair would have happened after marriage, but does show successful targeting of vulnerable groups

2020 Observations: In terms of the control variables, although four of these are technically statistically significant, the one that matters is nationality. **Syrian women are far more likely to have married early compared to vulnerable Lebanese.** Regarding the other factors, SDC distribution is likely due to the relative distributions of Syrian and Lebanese within each SDC. Britel has the highest percentage of Lebanese mothers compared to Syrian mothers in the sample so should show much lower percentages of early marriage just by this. Literacy levels are likely correlative rather than causative (if one gets married early one is likely not going to be continuing education) and participation in Medair activities happens after the fact.

However, it is a positive sign that there is a relatively high percentage of married early women participating in Medair activities because this **implies that the targeting of beneficiaries for inclusion in the project activities is targeting the appropriately vulnerable women**.

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[12] Technically, this would also hold true for early marriage, except this is a non-reversible condition. Once someone becomes married at an early age, they cannot choose to not become married at an early age. Thus, it is not surprising that the sample of mothers holds stable over time on early marriage.

[13] Green = Significant – meaning a p-value of less than .05. Actual values can be found in the SPSS dataset should further p-value numbers be desired.

[14] Only applicable when statistically significant

Multi-Year Observations: Although this is an indicator in the logframe, **given that the target population is working with mothers who are already married, it is unlikely that this project could reasonably affect this indicator, and this has shown to be the case**. Relative percentages of early marriage held stable in the samples across the multiple years of the dataset. The only unusual pattern was a statistically significant drop in early marriage among Lebanese mothers in 2020 compared to 2019.

Indicator 2: Percent of mothers who cannot read or write.

Table 7: Percentage who *cannot* read or write.

Nationality	2020 Indicator Value	2019 Value	Start Value[15]	Multi-Year Pattern
Syrian	44.8	38.8	41.0	Stable within margin of error
Lebanese	4.9	6.9	8.4	Stable within margin of error

Table 8: 2020 Demographic comparison against literacy

Demographic	Significance (Y/N)[16]	Percentage Point Difference[17]	Comment
Nationality		39.9	Substantive difference in literacy
SDC[18]		11.2	Britel lowest and Kabelias highest
Catchment			
Literacy	NA	NA	
Marriage		12.7	Same correlation component as Indicator 1
Participation			

2020 Observations: In terms of the control variables, although three of these are technically statistically significant, the one that matters is nationality. **Syrian women are far more likely to not be able to read or write compared to vulnerable Lebanese.** Regarding the other factors, SDC distribution is likely due to the relative distributions of Syrian and Lebanese within each SDC. Britel has the highest percentage of Lebanese mothers compared to Syrian mothers in the sample so should show much lower percentages of not being able to read or write. As mentioned above, literacy levels are likely correlative rather than causative (if one gets married early one is likely not going to be continuing education). Participation in Medair activities should not likely influence literacy levels since activities are not oriented towards adult literacy programming.

Multi-Year Observations: Although this is an indicator in the logframe, **the activities are not oriented towards promoting adult literacy, so it is not surprising that little change would be seen in this indicator**. There is a slight decline in Lebanese levels of illiteracy and there is a volatile movement among Syrians. However, these variations are all within the margin of error and so are likely more sampling artefacts than actual changes in mothers over the period of the project. The multi-year patterns tend to fluctuate within the margin of error, so patterns appear stable.

4.2.2   Health Seeking Behaviour

There are two indicators related to health seeking behaviour – whether mothers sought qualified medical services when needed and whether mothers used SDCs that were supported by Medair. Supplementary questions included exploring reasons for why not accessing services (or Medair SDCs).

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[15] Question first asked in 2018

[16] Green = Significant

[17] Only applicable when statistically significant

[18] Percentage point difference reflects different between lowest and highest SDC

Indicator 3: Percent of Mothers who went to qualified health services when they needed medical services.

In the survey, respondents were first asked if they or their children had been in need of medical services in the year prior. Then, for those that said yes, a follow up question was asked regarding whether they had sought medical services and from were. **The percentage of respondents who answered yes to this question tended to hold steady throughout the entire five-year period** fluctuating around 85% (give or take three percentage points). The relative percentages of need were the same for both Syrian and Lebanese respondents. **At all times, over 90% said that they had sought services at least some of the time.** This pattern was high to begin with and increasing over time (about 8 ppt).

Because seeking services is so high, there were very few useful responses among reasons why help was not sought. Although a range of options was presented in the survey, the number of respondents per option was usually less than 5 (out of a sample of 2700 women). The most frequently cited reason was expense (n=14) but even this comprises less than .05% of the sample.

A more interesting analysis is related to the percentage of respondents who reported that they sought services EACH time. The following table summarizes the patterns among respondents in terms of seeking services every time needed.

Table 9: Percent who sought health services each time.

Nationality	2020 Indicator Value	2019 Value	Start Value[19]	Multi-Year Pattern
Syrian	55.3	49.1	42.4	Increasing
Lebanese	70.5	67.1	55.2	Increasing

Table 10: 2020 Demographic comparisons against seeking health services each time needed.

Demographic	Significance (Y/N)[20]	Percentage Point Difference[21]	Comment
Nationality		15.2	Lebanese more likely to go each time than Syrians
SDC		28.9	Lowest are Marj and Talia. Highest is Britel
Catchment			
Literacy		6.7	Illiterate mothers less likely to seek help each time
Marriage			
Participation			

Table 11: 2020 Health Facility Access[22]

Nationality	Dispensary	Clinic	Hospital	Pharmacy
Syrian	88.6	12.3	5.0	10.7
Lebanese	58.4	50.0	19.2	17.4

Table 12: Percent Reporting Multi-Year Health Facility Access

	Dispensary		Clinic		Hospital		Pharmacy	
Nationality	**2016**	**2020**	**2016**	**2020**	**2016**	**2020**	**2018[23]**	**2020**
Syrian	28	88.6	12.1	12.3	17.0	5.0	12.7	11.9
Lebanese	15.1	58.4	43.0	50.0	27.5	19.2	15.2	17.4

2020 Observations: **Nationality and SDC coverage made a big difference in the pattern of responses followed by literacy**. The SDC patterns this time are not correlated with nationality as the

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[19] Percentages for 2017 were distorted because in that year the question was only yes or no. Therefore, the 2017 values are excluded from above.

[20] Green = Significant

[21] Only applicable when statistically significant

[22] The survey also asked about doctors, nurses, midwives, and CHVs, but these responses were so few as to not be able to be registered

[23] First asked in 2018

two SDCs which had the lowest percentage of women saying that they went each time were also SDCs that had relatively equal balance between Syrian and Lebanese women in the sample. **Women who could not read or write were less likely to seek help each time.** However, there was no difference among those women who were married early compared to those who were married over the age of 18. This suggests that while vulnerability as a whole is important, there is an additional layer of importance to the effect of literacy on seeking medical services.

There were statistically significant differences concerning where Syrians and Lebanese chose to seek their medical services. **Syrians were MUCH more likely, almost exclusively, to seek medical services from dispensaries** (including the Medair SDCs) while Lebanese tended to have a more diversified approach. They did seek out services at dispensaries, although at percentages much lower than Syrians, but Lebanese mothers also sought services at private clinics and hospitals as well in greater percentages than Syrians. Those living outside of the catchment areas were not less likely to seek medical services, but their patterns of access tended to mirror Lebanese patterns, about half might go to dispensaries (59.2%), but were also much more likely to go to clinics (44.7%), hospitals (18.9%) and pharmacies (21.5%).[24] **This suggests that while those living outside the catchment areas tend not to use the dispensaries as often as those inside the catchment areas, they are still able to access their health medical services from somewhere**.

Multi-Year Observations: There are two positive patterns in the multi-year observations from Table 10 and 12. First, the percentages of respondents seeking help each time has increased steadily from the 2016 starting point well beyond the margin of error. Second, the percentage of those reporting that they have accessed clinics and pharmacies has stayed stable from the baseline. However, there have been substantive swings in the percentages of respondents accessing medical services from dispensaries and hospitals. For both Syrian and Lebanese, the percentage of respondents accessing medical services from hospitals has declined at the same time that there has been a massive increase in Syrians (60 ppt) and Lebanese (43.3 ppt) accessing medical services from the dispensaries. This is encouraging because the patterns of where to access confirm that the **SDCs do provide a resource for accessing medical services which helps provide some relief to the Lebanese medical system from the strain of the high numbers of persons in need**.

Indicator 4: Percent of Mothers who visited Medair support SDC in prior 12 months.

Table 13: Percent who visited Medair supported SDC.

Nationality	2020 Indicator Value	2019 Value	Start Value	Multi-Year Pattern
Syrian	79.0	49.8	42.2	Increase
Lebanese	60.3	41.4	34.2	Increase

Table 14: 2020 Demographics comparison against Medair SDC visits[25]

Demographic	Significance (Y/N)[26]	Percentage Point Difference[27]	Comment
Nationality		18.7	Syrians more likely to use Medair SDCs
SDC		24.1	Marj lowest (56.5) while Kabelias highest (80.6)
Catchment		33.8	Those inside the catchment areas far more likely to access Medair SDCs
Literacy		8.8	Mothers who cannot read or write MORE likely to visit Medair SDCs

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[24] Further details can be found in the SPSS output tables accompanying the study.

[25] This question only included from 2018 in this format. Previously was linked to use of Dispensaries in general.

[26] Green = Significant

[27] Only applicable when statistically significant

Marriage		5.1	Mothers who were married earlier MORE likely to visit Medair SDCs
Participation		21.8	Those who participated in Medair activities MORE likely to visit Medair SDCs

2020 Observations: All of the demographic factors did influence the patterns in attending Medair SDCs. **The patterns suggest that the Medair SDCs are an important resource for the more vulnerable populations.** Syrians were more likely to use Medair SDCs, as well as mothers who could not read or write and those who were married early. Participation in Medair activities had a major effect on the distribution of responses. Not surprisingly, those respondents who lived outside the catchment area were less likely to access Medair SDCs, but even with the distance, a large percentage still reported accessing Medair SDCs. Which SDC coverage area had an unusually high effect on accessing Medair SDCs – and the patterns were again not correlated with the distribution of nationality in the sample. The lowest percentage of respondents accessing a Medair SDC was in Marj (56.5%). The other SDCs were more closely clustered with Kabelias and Talia recording the highest percentage of respondents (80.5%).

Among those who did *not* access Medair SDCs, the reasons given were *not* related to quality. The most commonly reported factor was that they had not heard of the SDC (290 persons in 2020) or that they simply had not realized that it was a Medair SDC – but may have accessed it anyway (193). Lebanese were a little more likely to report not having heard of the SDC than Syrians (152 people versus 138 people). These ratios are about 5 percent of the total sample. This may not be enough to imply the need for further action, but some modest gains might be gained with further visibility of Medair SDCs. However, given the substantive increases in Medair SDC usage, it is unlikely to be a value-added investment in new activities.

Multi-Year Observations: The percentage of respondents accessing Medair SDCs has increased substantively over the project cycle. The increase is greater for Syrians (36.8 ppt) compared to Lebanese (25.9 ppt) but both nationalities are reporting accessing the Medair SDCs in ever increasing frequency. This positively suggests that Medair's support to these SDCs has played an important role in improving the quality of health services over time and supporting what **has become a key component in the overall health system services to both vulnerable populations and refugees**.

4.2.3   Reproductive Health Services

This section assesses the degree to which respondents can access and are satisfied with reproductive health (RH) services – Ante-natal care (ANC), post-natal care (PNC), family planning (FP) and Sexually transmitted illnesses (STI). Five indicators operationalize this dimension: Whether respondents are aware of what types of RH services are available and where they can access them. Whether respondents would feel comfortable and able to access these services. Finally, whether respondents did access these services in the last six months and how satisfied they were with the services provided.

Indicator 5: Percent of respondents who correctly identify available RH services.

Table 15: Respondents can cite at least one RH service available.

Nationality	2020 Indicator Value	2019 Value	Start Value	Multi-Year Pattern
Syrian	91.5	87.9	80.1	Increasing
Lebanese	90.0	89.3	88.6	Stable

Table 16: Percent of respondents who can cite each RH service by year.

	ANC		PNC		FP		STI	
Nationality	**2016**	**2020**	**2016**	**2020**	**2016**	**2020**	**2018**[28]	**2020**
Syrian	76.8	89.6	40.1	78.3	11.2	25.9	11.1	17.1
Lebanese	87.3	89.1	60.4	86.6	20.7	36.9	13.9	29.0

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[28] First asked in 2018

Table 17: 2020 Demographic comparisons against each RH service[29]

Demographic	ANC Significance (Y/N)[30]	PNC Significance (Y/N)	FP Significance (Y/N)	STI Significance (Y/N)
Nationality		(green)	(green)	(green)
SDC		(green)	(green)	
Catchment				
Literacy			(green)	(green)
Marriage				(green)
Participation	(green)	(green)	(green)	(green)

Table 18: Percent of Respondents who can cite each service by year and nationality.

Nationality	Year	ANC	PNC	FP	STI
Syrian	2016	76.8%	40.1%	11.2%	NA
	2017	77.3%	58.7%	23.3%	NA
	2018	86.3%	54.0%	10.8%	11.10%
	2019	86.5%	66.8%	21.7%	26.90%
	2020	89.6%	78.3%	25.9%	17.10%
Lebanese	2016	87.3%	60.4%	20.7%	NA
	2017	84.0%	71.1%	27.7%	NA
	2018	88.4%	69.8%	17.8%	12.10%
	2019	88.4%	75.9%	27.2%	27.80%
	2020	89.1%	86.6%	36.9%	21.20%

2020 Observations: **The vast majority of respondents can cite at least one RH service – usually ANC and PNC services.** Only about a quarter of the women could cite FP services and STI services. In terms of being able to cite at least one service, none of the demographic factors were significant because the percentages were so high. However, for specific services, there were some factors that influenced each type of service. Syrians were as knowledgeable as Lebanese on ANC but were less knowledgeable on the other three services. SDC made a difference but with no consistent pattern. For PNC, Kabelias was unusually high compared to the other SDCs while for FP, Marj and Talia were unusually low compared to the other SDCs. Literacy and participation in Medair activities had a very slight influence – barely more than the margin of error – for knowledge about FP and STI services, but these percentages were still quite low. Interestingly, participation in Medair activities was significant for all four factors, but barely more than the margin of error. It appears that the **Medair activities have had an effect on contributing to increased awareness of available services although more could still be done regarding FP and STI services**.

Regarding being able to cite multiple services, Lebanese were more knowledgeable overall – about 8 ppt difference in terms of being able to cite two or more services but the two means were very close (2.1 versus 1.9) even though technically statistically significant. No demographic factor was statistically significant for means except for nationality. Overall, there is widespread knowledge of the availability of ANC and PNC services but very little awareness of FP and STI still.

Multi-Year Observations: There are positive trends within the multi-year datasets. **For Syrian mothers, knowledge of all RH services has increased from the baseline to a statistically significant degree.** The biggest gains have been in knowledge of PNC services available (38.3 ppt). Knowledge of STI and FP has been more volatile with 2016 and 2018 significant outliers. The latter is likely due to the changes in sampling for 2018. In contrast, for **Lebanese mothers, knowledge of ANC services has stayed stable – because it was already high – but there were significant gains in the other three**

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[29] Due to space and readability considerations, the percentage point differences are not cited here but can be found in the SPSS tables accompanying this report.

[30] Green = Significant

dimensions as well – although usually to a lesser degree than for Syrians. Knowledge of PNC services increased the most from 2016 (28.2 ppt). This was influenced largely by a big jump in 2020 compared to the 2019 percentages (10.7 ppt).

Indicator 6:   Percent of respondents who correctly identify where to access RH services.

Table 19: Respondents can cite at least where one RH service available.

Nationality	2020 Indicator Value	2019 Value	Start Value	Multi-Year Pattern
Syrian	91.1	87.1	65.7	Increasing
Lebanese	89.5	89.2	90.2	Stable

Table 20: Percent of respondents who can cite each RH location by year[31]

	Dispensary		Clinic		Hospital		Pharmacy		Doctor	
Nationality	2016	2020	2016	2020	2016	2020	2018[32]	2020	2018[33]	2020
Syrian	24.3	86.0	29.7	19.9	15.5	5.1	2.2	4.1	9.8	2.5
Lebanese	7.8	44.7	75.1	63.0	15.5	15.5	3.4	9.5	15.1	7.9

Table 21: 2020 Demographic comparisons against at least where RH service[34]

Demographic	Dispensary Significance (Y/N)[35]	Clinic Significance (Y/N)	Hospital Significance (Y/N)	Pharmacy Significance (Y/N)	Doctor Significance (Y/N)
Nationality					
SDC					
Catchment					
Literacy					
Marriage					
Participation					

Table 22: Percent of Respondents who can cite where specific services by year and nationality.

		Dispensary	Clinic	Hospital	Pharmacy	Doctor
Syrian	2016	24.3%	29.7%	15.5%	NA	NA
	2017	35.2%	36.2%	10.2%	NA	NA
	2018	71.2%	18.4%	2.8%	2.2%	9.8%
	2019	69.6%	29.2%	4.1%	1.8%	12.4%
	2020	86.0%	19.9%	5.1%	4.1%	2.5%
Lebanese	2016	7.8%	75.1%	15.5%	NA	NA
	2017	13.6%	67.2%	18.2%	NA	NA
	2018	27.2%	64.3%	6.2%	3.4%	15.1%
	2019	31.1%	70.1%	8.8%	3.4%	19.6%
	2020	44.7%	63.0%	15.5%	9.5%	7.9%

2020 Observations: **A substantive majority (90+) could cite at least one location for RH services**. The location cited was either a dispensary or a private clinic.   Relatively few respondents cited hospitals, pharmacies, or doctors (usually less than 10% of the sample) and almost no one cited nurses or midwives (less than 1% of the sample). There were no differences among the factors in terms of

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[31] Nurses and Midwives were also included in the survey, but the numbers were too low to provide useful analysis

[32] First asked in 2018

[33] First asked in 2018

[34] Due to space and readability considerations, the percentage point differences are not cited here but can be found in the SPSS tables accompanying this report.

[35] Green = Significant

being able to identify one RH location. However, **there were differences in terms of whether a dispensary or a clinic was cited among the demographic variables.** Syrians (43.7 ppt), women who could not read or write (17 ppt), those who were married early (12 ppt) and those who participated in Medair activities (12 ppt) were more likely to cite dispensaries as an RH location. Persons living outside the catchment areas tended to have similar response patterns to Lebanese in terms of locations of RH services.

By SDCs, about double the respondents cited dispensaries versus clinics (70% to 35% approximately). Kabelias had the highest percentage (80.9%) while Britel had the lowest (62.4) with the remainder clustered around 70%. For citing private clinics, Britel respondents had the highest percentage (48.7%) while Marj had the lowest (27.8%) but there were no clear patterns among the SDC percentages.

Multi-Year Observations: The multi-year database shows an interesting pattern. Compared to 2016, **dispensaries have become increasingly recognized among respondents as a location for RH services, especially for Syrians**. Syrians increased by 81.7 ppt from 2016 in citing dispensaries and Lebanese increased by 36.9 ppt. At the same time, clinics and hospitals became less frequently cited among Syrians (-9.8 ppt and -10.4 ppt respectively). Among Lebanese respondents, hospitals and clinics tended to be more stable compared to the initial year of the project cycle.

This pattern is not likely due to a decline in the quality of RH services at these respective locations, but rather it probably reflects the greater visibility of dispensaries as resources for RH services as a result of the project contributions to the SDCs. This has led to respondents, especially Syrians and the more vulnerable segments of the population, as coming to equate RH services with dispensaries.

Indicator 7: Percent of respondents who report that they would be comfortable and able to access RH services.

Table 23: **Percent respondents reporting being comfortable and able to access RH services.**

Nationality	2020 Indicator Value	2019 Value	2016 Value	Multi-Year Pattern
Comfortable				
Syrian	93.5	95.5	94.6	Stable
Lebanese	96.3	96.2	92.5	Stable
Able				
Syrian	89.5	78.0	70.3	Increasing
Lebanese	95.8	86.4	86.3	Stable (with increase 2020)

Table 24: 2020 Demographic Comparisons for Comfort and Access

Demographic	Significance (Y/N)[36]	Percentage Point Difference[37]	Comment
Comfortable			
Nationality		5.3	Very slight difference, barely more than margin of error. Percentages high for both groups.
SDC			
Catchment			
Literacy			
Marriage			
Participation			
Able			
Nationality		6.3	Very slight difference and already very high for both nationalities

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[36] Green = Significant
[37] Only applicable when statistically significant

SDC		9.1	Marj and Talia slightly lower (88%) and Britel (96.3) highest.
Catchment			
Literacy		5.2	Percentages high for all, but women who cannot read or write slightly less able
Marriage			
Participation			

2020 Observations: **The percentages are very high for both being comfortable and being able to access RH services**. While this is a positive factor, it reduces the degree of analysis that can be done because there is so little variation among the patterns of responses. There is a small difference between Syrian respondents who said they would be comfortable (93.5%) and Syrians who said that they would be able (89.5%). This is only about 4 ppt difference and both values are very high, but it suggests that for a few specific individuals (less than 150 out of a 2700-person sample), there would be some level of difficulty accessing RH services even if they felt comfortable doing so. Given the relative percentages, it is likely women who cannot read or write who would feel most constrained about being able to access RH services.

One reason it is likely that these responses are so consistently high is that respondents are likely only considering ANC – and maybe PNC – among their suite of RH services. More than 90% of the respondents cited these two options, but less than a quarter could cite the other services. There is much less controversy or stigma associated with ANC and PNC RH services. **If respondents had been specifically asked about their comfort level for FP consultations or STI, it is possible that for those services, a greater percentage would not feel either comfortable or able to access the services**.

Multi-Year Observations: The 2020 values for this indicator suggest that little more needs to be done (at least for ANC or PNC services). Across the years, respondents were generally consistently positive about their level of comfort for accessing RH services. The percentage of positive responses held stable across the entire five-year period. However, there have been gains in respondents' reported ability to access RH services, especially for Syrians. Among Syrian mothers, there had been a 19.2 ppt increase since 2016 in terms of being able to access RH services. **This positively reflects that project contributions have helped facilitated improved access to Syrian women to RH services**. The pattern for Lebanese women is slightly more complex. For the first four years, the percentage of responses on ability to access held stable and high (low to mid 80%). Then, in 2020, there was a sudden increase of 9.4 ppt to 95.8% of Lebanese women. It cannot be confirmed why there was a sudden increase in 2020 for Lebanese mothers, even in the midst of a worsening economic situation, but it *may* be related to increased communication, such as inclusion in Medair activities, regarding the availability of services for Lebanese mothers in the catchment areas from the SDCs.

Indicator 8: Percent of respondents who report accessing RH services in prior 6 months.

Table 25: Percent of respondents reporting accessing at least one RH service last six months.

Nationality	2020 Indicator Value	2019 Value	2016 Value	Multi-Year Pattern
Syrian	46.5	41.6	33.0	Increased from 2016-2017, then stable
Lebanese	45.2	40.0	44.6	Volatile but stable endpoints

Table 26: Type of RH service sought by year and nationality.

Nationality	Year	ANC	PNC	FP	STI
Syrian	2016	28.6	12.8	5.7	NA
	2017	34.1	24.4	8.4	NA
	2018	38.1	23.7	2.6	0.8
	2019	31.6	18.4	4.3	2.4

	2020	36.6	28.6	6.8	2.0
	2016	38.6	28.8	7.8	NA
	2017	33.0	26.4	6.5	NA
Lebanese	2018	44.7	33.6	4.9	1.2
	2019	29.9	22.7	4.6	1.8
	2020	33.3	33.0	9.7	1.6

Table 27: 2020 Demographics by type of RH service sought.

Demographic	At least one Significance (Y/N)[38]	ANC Significance (Y/N)[39]	PNC Significance (Y/N)	FP Significance (Y/N)	STI Significance (Y/N)
Nationality					
SDC	[40]	[41]	[42]	[43]	
Catchment					
Literacy					
Marriage					
Participation	13.6 ppt	14 ppt	12.9 ppt		

Table 28: Where were RH services sought?

		Dispensary	Clinic	Hospital	Pharmacy	Doctor
Syrian	2016	66.9	22.3	9.9	NA	NA
	2017	60.9	27.0	8.7	NA	NA
	2018	72.0	16.4	2.4	1.8	5.4
	2019	64.6	23.1	2.3	0.9	5.5
	2020	79.1	15.7	2.3	1.0	1.5
Lebanese	2016	14.0	76.9	9.3	NA	NA
	2017	21.8	63.9	12.6	NA	NA
	2018	25.3	58.2	6.4	0.8	8.9
	2019	21.5	60.1	5.6	2.0	10.6
	2020	31.5	46.0	12.0	3.1	2.9

2020 Observations: In both Syrians and Lebanese, about 45% reported seeking at least one RH service in the past six months. **The most frequently sought services were ANC and PNC service**s with about one-third of the respondents reporting that they had accessed one of these two services. Almost no one reported accessing FP or STI services. Nationality did not really influence seeking services although Lebanese were slightly more likely to report seeking PNC services than Syrians, but the difference was within the margin of error. **The most significant influence on seeking services was whether respondents had participated in Medair activities.** Those that had participated in activity were more likely to seek an RH service (13.6 ppt), and especially ANC services (14 ppt) and PNC services (12.9 ppt). The SDC differences are somewhat misleading as the SDCs are spread out over a range of which the highest and lowest values are statistically different, but the intervening values are not. However, Marj SDC tended to have the fewest respondents seeking services while Joub Janine or Britel tended to have the most respondents.

Where services were sought followed a similar pattern to knowledge of locations discussed earlier. The vast majority of respondents were choosing between either dispensaries or clinics to access their RH service. Syrians were more likely to access services at dispensaries while Lebanese were more equally

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[38] Green = Significant

[39] Green = Significant

[40] Marj lowest (38.9%) and Joub Janine highest (50.4%)

[41] Marj lowest 28.7, Britel highest 40.4

[42] Marj lowest 24.6, Britel highest 35.9

[43] Kabelias lowest 3.9, Joub Janine highest 12.9

distributed between dispensaries and private clinics. A small percentage did report using hospitals – more so among Lebanese. Practically no one reported using doctors, nurses, midwives, or other options available in the survey.

Multi-Year Observations: In terms of the multi-year analysis, **there has been an increase in respondents reporting seeking services from 2016 for Syrians (13.5 ppt).** The biggest increase was a jump from 2016 to 2017, and then relatively stable percentages to 2020. For Lebanese, the start and end points were more or less the same between 2016 and 2020, but the reported numbers were more volatile in between.

When disaggregated by which type of service, **seeking ANC and PNC services were by far the most important RH services sought.** Less than 10% of the respondents in any year reported access FP or STI services. Syrian mothers showed the biggest increases in accessing PNC services (15.8 ppt) but also saw increases in ANC (10 ppt). Lebanese mothers were more volatile year to year for ANC and PNC but ended at similar percentages to 2016. Syrian women in 2016 had significantly lower percentages of accessing RH services than Lebanese, but by 2020, Syrian women had matched Lebanese women as percentages accessing RH services (ANC and PNC). FP and STI services are still not sought to any significant degree by either group.

As with the RH location discussion, the multi-year patterns reflect an increasingly important role for dispensaries in the provision of RH services. Syrian women continued to be more likely to use dispensaries for their RH services, but this increased by 13 ppt from 2016. As a result, Syrian women accessing hospitals and clinic declined commensurately (6.6 ppt and 7.6 ppt respectively). Lebanese mothers tended to access their services at clinics or hospitals, but even among them, **the percentage of Lebanese women accessing dispensaries for RH services assumed a larger and larger share** increasing by 17.5 ppt from 2016. For both Syrian and Lebanese women, **there was a particularly marked increase from 2019 to 2020 in terms of respondents reporting accessing dispensaries** (12.5 ppt and 10 ppt respectively) and a subsequent declined in those reporting accessing clinics or hospitals. It may be that the COVID-19 pandemic caused shifts in the patterns of where women could access RH services, but encouragingly, the percentage still seeking services continued to remain high.

Indicator 9:   Percent of mothers with children under 24 months who report satisfaction with RH services provided.

Table 29: Percent satisfied or very satisfied with RH service.

Nationality	2020 Indicator Value	2019 Value	Start Value	Multi-Year Pattern
Syrian	96.8	97.3	90.1	Slight increase
Lebanese	99.5	97.0	93.6	Slight increase

Table 30: Percent satisfied by type of RH service.

Nationality	Year	ANC	PNC	FP	STI
Syrian	2016	89.5	89.4	90.5	NA
	2017	92.1	94.8	92.5	NA
	2018	97.5	98.6	97.4	97.6
	2019	97.7	97.5	95.5	97.3
	2020	96.9	97.6	96.7	96.9
Lebanese	2016	94.6	94.6	96.7	NA
	2017	96.3	97.1	93.0	NA
	2018	98.2	98.8	100	97.8
	2019	97.8	98.8	100	97.2
	2020	99.7	100	98.9	97.8

Table 31: Percent satisfied by location of RH service.

		Dispensary	Clinic	Hospital	Pharmacy	Doctor
Syrian	2016	87.7	100	83.3	NA	NA
	2017	90.9	92.3	100	NA	NA
	2018	97.2	98.3	94.4	92.3	100
	2019	96.8	98.6	95.2	100	97.1
	2020	96.2	99.2	100	100	100
Lebanese	2016	91.7	93.9	100	NA	NA
	2017	95.2	96.7	97.2	NA	NA
	2018	98.0	98.7	92.0	100	100
	2019	93.8	98.4	94.1	100	96.9
	2020	98.6	100	100	100	100

2020 Observations: This question was specifically targeting mothers with children under two years of age rather than the entire sample. There is very little that can be abstracted from the dataset because the responses are too high and too positive. **The vast majority of respondents reported positive perceptions regarding the quality of their service (**either satisfied or very satisfied). Response rates were well over 90% for location and type of service provided. These high rates of satisfaction may be a technical artefact – people may not know what quality service should look like, and therefore are happy with whatever they receive. However, it may also be reflective of the fact that the mothers do have options regarding where they access their services, and they are more likely to do so from places they trust or are confident in. In either case, there are no significant differences among the social factors because the satisfaction rates are too high.

Multi-Year Observations: RH services are related to when women were pregnant, for those women surveyed in 2016 and 2017, their pregnancy would have occurred prior to Medair support to the SDCs. As such, the 2016 and 2017 values can serve as a proxy comparison group to the later years. However, the multi-year analysis shows **consistently high satisfaction rates across the years.** There is a slight increase for both nationalities – just beyond the margin of error – from 2016. However, even then, the increase was from an already high value (low 90%s) to an even higher value (high 90%s). **Perhaps the most interesting pattern in the data is that satisfaction among Syrian women regarding dispensary service and hospital service has improved** the most (8.5 ppt and 16.7 ppt respectively). This could be reflective of project contributions to strengthening the dispensary service quality or social communication regarding the treatment of Syrian mothers in hospital settings. However, the values are still high, even in 2016.

4.2.4   Ante-Natal Care (ANC) Visits

Ante-natal care (ANC) is measured through three indicators all of which focus on those mothers with children under two. Whether a mother had had at least four comprehensive ANC visits while pregnant with their youngest child. Whether the first ANC visit occurred during the first trimester. Whether the last ANC visit occurred during the final month of pregnancy.

Indicator 10: Percent of mothers[44] who had at least four ANC visits

Table 32: Percentage of mothers with at least four ANC visits

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	71.7	65.3	65.5	64.3	57.5	Increasing
Lebanese	93.6	83.0	82.5	82.4	79.0	Increasing

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[44] With children under two years of age.

Table 33: 2020 Demographic comparison by ANC visit

Demographic	Significance (Y/N)[45]	Percentage Point Difference[46]	Comment
Nationality		21.9	
SDC		11.6	Lowest Talia, highest Joub Janine
Catchment			
Literacy		6.3	
Marriage		7.1	
Participation			

Table 34: Where ANC visits were carried out[47]

		Dispensary	Clinic	Hospital
Syrian	2016	30.2	33.3	22.0
	2017	31.7	26.4	14.8
	2018	58.5	31.6	3.2
	2019	54.8	41.8	1.8
	2020	69.8	30.1	3.8
Lebanese	2016	9.9	76.1	14.5
	2017	8.4	50.6	23.4
	2018	16.7	75.7	4.1
	2019	15.3	83.4	4.1
	2020	29.7	71.0	9.7

2020 Observations: The differences in nationality were substantive (21.9 ppt). **Only about three quarters of Syrian mothers reported receiving at least four ANC visits** (with another 13.1% reporting receiving three visits). Lebanese women were almost always likely to have four ANC visits (94%). There were differences among the SDCs with Britel and Joub Janine having higher percentages of positive responses (about 10 ppt more than the other SDCs). Whether a mother could read or write and whether she had married early were also statistically significant although the degree of changes was much smaller for these factors. Although there were a variety of options presented for where one might go for ANC visits, the two main sources are either dispensaries or private clinics with hospitals a very distant third. **Syrian women were far more likely to use dispensaries (40.1 ppt) and Lebanese women were far more likely to use clinics (39.9 ppt).** In the survey, there were also options asking who did the mothers see for ANC care and they could choose among doctors, nurses, or the community midwives. The vast majority reported seeing a doctor. Nurses and midwives together comprised less than 2% of the responses.

Multi-Year Observations: Although about a quarter of Syrian women did not receive four ANC visits, nevertheless, **there has been substantive progress since 2016 in terms of the percentage of mothers receiving four visits – for both Syrians and Lebanese**. Syrian women increased by 14.2 ppt since the baseline while Lebanese women increased 14.6 ppt since 2016. The percentage of respondents going to dispensaries for ANC care also increased substantively for both Syrians (39.7 ppt) and Lebanese (19.8 ppt). Mothers tended to attend clinics at more or less the same rates across the years – although with volatile variations. The primary effect of the increase in using dispensaries to a greater degree for ANC services is seen in the relative decline of respondents reporting using hospitals which declined about 5 ppt for Lebanese mothers and 18.2 ppt for Syrian mothers. **This is a positive trend in that it reflects the increasing role that dispensaries are playing in the health service provision system and the potential of these dispensaries to reduce the strain on the overall health system.**

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[45] Green = Significant

[46] Only applicable when statistically significant

[47] Other options were provided on the survey, but practically all women access one of these three options for ANC visits

Indicator 11: Percent of mothers who had their first ANC visit within the first trimester.

Table 35: Percentage of mothers with visit within first trimester

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	90.0	83.5	84.1	83.5	74.5	Increasing
Lebanese	97.2	92.2	94.6	92.9	87.2	Increasing

Table 36: 2020 Demographic comparison by first trimester

Demographic	Significance (Y/N)[48]	Percentage Point Difference[49]	Comment
Nationality		7.2	
SDC			
Catchment			
Literacy			
Marriage			
Participation			

2020 Observations: A very **high percentage of mothers reported receiving their first visit within the first trimester** regardless of nationality. Lebanese were more likely to carry out a first trimester visit, but the differences were comparatively slight (7.2 ppt) compared to other indicators. No other social factor affected the distribution of responses. This is likely because the values are so high to begin with. Little more can be abstracted from this analysis except to illustrate that **although Syrian mothers may comparatively struggle with getting four ANC visits, they have positive results in terms of ensuring their first ANC visit is within the first trimester**.

Multi-Year Observations: ANC services are related to when women were pregnant, for those women surveyed in 2016 and 2017, their pregnancy would have occurred prior to Medair support to the SDCs. As such, the 2016 and 2017 values can serve as a proxy comparison group to the later years. **Increases were seen in both Syrians and Lebanese from 2016** although the biggest gains were with Syrians (15.5 ppt). Lebanese did increase by 10 ppt since 2016 as well, but much of this was from a big jump between the 2016 and 2017 years. After which the percentage of responses tended to hold steady. This suggests that the Medair support may be contributing to improved ANC visits.

Indicator 12: Percent of mothers who had their last ANC visit within the last month.

Table 37: Percentage of mothers with visit last month

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	81.8	80.8	78.5	77.8	85.5	Stable
Lebanese	92.4	88.1	82.1	85.5	85.5	Mostly Stable

Table 38: 2020 Demographic comparison by last month

Demographic	Significance (Y/N)[50]	Percentage Point Difference[51]	Comment
Nationality		10.6	
SDC		9.8	Kabelias lowest and Britel highest
Catchment			
Literacy			
Marriage			

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[48] Green = Significant
[49] Only applicable when statistically significant
[50] Green = Significant
[51] Only applicable when statistically significant

Participation				

2020 Observations: Syrian mothers were less likely than Lebanese mothers to have a final ANC visit in the last month of pregnancy. However, **the percentage of Syrian respondents having a last month visit is still high (81.8%).** There are no social factors that influence the likelihood of a mother getting a last month ANC visit besides nationality (10.6 ppt). There is some variation among the SDCs, but from one SDC to another the difference is slight and only by comparing the lowest SDC with the highest is the difference even statistically significant.

Multi-Year Observations: ANC services are related to when women were pregnant, for those women surveyed in 2016 and 2017, their pregnancy would have occurred prior to Medair support to the SDCs. As such, the 2016 and 2017 values can serve as a proxy comparison group to the later years. Across the five-year period, there are fluctuations in the percentage of respondents who had last month visits however **the overall trend is mostly stable**. For Syrian mothers, the annual average fluctuates around high 70%s to low 80%s and for Lebanese mothers, the annual average hovers around the mid 80%s. There is a slight uptick from 2018 (a low of 82.1%) to 92.4% in 2020 for Lebanese mothers. It could be that some policy shifts in 2019 have led to a more consistent ANC visit pattern among Lebanese mothers, but it is not clear why such a policy would not also be influencing Syrian mothers – which have held comparatively stable in contrast.

4.2.5   Delivery

This dimension seeks to ensure healthy behaviour regarding the birth of a child. This is operationalized through four indicators: Whether they delivered in hospital. Whether the birth was by Caesarean section. Whether the mother received a health booklet for the child and whether the mothers stayed for more than 24 hours in the hospital after delivery.

The first indicator is based on the concerns that the Syrian refugee mothers lacked access to health care facilities and were giving birth inside the informal tented settlements (ITS) outside of the health care system. The informal births may also impede the proper registration of the child with health booklets. The last indicator is considered important for good mother and child health with MoPH recommendations of 48 hours for regular births and 72 hours for C-section.

Indicator 13: Percent of mothers who delivered their child at hospital.

Table 39: Percentage of mothers who delivered their child at hospital or clinic.

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	95.6	91.6	91.4	89.6	87.7	Increasing
Lebanese	99.8	99.7	99.6	96.4	98.7	Stable

Table 40: Percentage of mothers who delivered their child at hospital only.

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	83.3	81.4	79.7	73.9	79.8	Stable
Lebanese	89.4	87.8	87.0	91.8	90.7	Stable

Table 41: 2020 Demographic comparisons against delivery at hospital ONLY

Demographic	Significance (Y/N)[52]	Percentage Point Difference[53]	Comment
Nationality		5.9	
SDC		17.1	Talia had lowest (75.8) and Kabelias/Joub Janine highest (95%+)
Catchment			

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[52] Green = Significant
[53] Only applicable when statistically significant

Literacy			
Marriage			
Participation			

2020 Observations: There are very few births that happen outside of the medical system in the ITS. **Practically every mother in the survey reported giving birth in either a hospital or clinic for both Syrians and Lebanese** although there were very slight differences. Lebanese mothers were almost unanimous in giving birth in either a hospital or clinic while about 4% of Syrian mothers did NOT give birth in one of these two options. In the choice between hospitals or clinics, Lebanese mothers tended to use hospitals more often (5.9 ppt) but both populations reported using clinics to about the same degree (less than 2 ppt difference) with about 10% of the sample using clinics as an option. This suggests that the concerns regarding mothers giving birth in ITS are no longer warranted. The overwhelmingly vast majority have good access to the formal health care system.

Among the reasons cited for not using the formal system, going into rapid labour was the only one with more than 9 responses. Forty women said that they did not use the formal system because of rapid labour (out of 2641 births). Every other reason was less than 10. The main takeaway from the responses is that the embedded assumptions for why women may not go to the formal system for delivery are flawed. The establishment of the SDCs has been more significant than the assumption (embedded in the survey questions) that women needed to have their awareness raised. Women actually do access the formal health system, they are not scared to go to the hospital, they know where it is, they are registered, and they are not impeded by tradition. **The use of clinics has provided better local access to the few women that were impeded by access since 2016**.

Because of the very high percentages reporting for use of the formal health care system, there are no significant differences among the demographic variables. **Practically all mothers use the formal health care system for delivery regardless of level of vulnerability.** Early marriage and literacy had small differences of about 4 ppt but were just inside the margin of error. Where there is a slight difference is in the percentage of women who choose to deliver at the hospital only (as opposed to clinics). Lebanese women are more likely, although the difference is just barely significant (5.9 ppt). **The SDC coverage area also makes a difference with respect to choosing to give birth in a hospital as opposed to a clinic**. Talia had the lowest reported percentage of women choosing to use hospitals (75%) while Kabelias and Joub Janine were both well over 95%+. This means that the women in Talia are choosing to use the clinics more frequently for birth, which could imply that the quality of the clinic is perceived to be good for delivery in Talia or it could imply slightly more difficult access to a hospital from the Talia SDC.

Multi-Year Observations: The percentages for delivery in the formal health care system were high even in 2016 at the start of the current cycle. For Lebanese mothers, the percentages did not change over time from 2016 and were well above 95% for all years. However, **for Syrian mothers, there was an increase of 7.9 ppt from 2016 in terms of using the formal health system for delivery** (from 87.7% to 95.6%). The percentage using hospitals stayed stable across the entire five-year period Therefore, **this increase in Syrian mothers giving birth in a hospital or clinic is due to the relative increase in mothers accessing the clinics for delivery**. This is a positive reflection that shows the increasing importance of the role of the clinics in providing access to health services such as delivery. The mothers who were giving birth in the ITS are now using the clinics instead. The same pattern of reasons why not delivery at hospital or clinic noted in 2020 held true over the entire five-year cycle. Rapid labour was a significant factor. The other reasons cited were usually less than 10 in any one year.

Indicator 14: Percent of mothers who delivered their child by C-section.

Table 42: Percentage of mothers who delivered their child via C-section.

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	29.2	29.8	30.0	35.8	37.7	Declining
Lebanese	54.7	59.0	53.7	58.2	65.9	Stable from 2017

Table 43: 2020 Demographic comparisons against C-section

Demographic	Significance (Y/N)[54]	Percentage Point Difference[55]	Comment
Nationality		25.5	
SDC		9.8	Not really significant. Britel just slightly higher than the rest and Talia just slightly lower than the rest.
Catchment			
Literacy		12.4	Women who could read and write were MORE likely to have C-sections
Marriage		7.8	Women who were married later were MORE likely to have C-sections
Participation			

2020 Observations: Globally, natural birth is promoted among health guidelines and there is concern regarding the casual use of C-sections as a convenience for doctors or mothers. As awareness raising activities increase, one should see a decline across the length of a project cycle in terms of the mothers using C-sections. **The percentage of mothers in 2020 who had C-sections is surprisingly high in the sample**. Lebanese women are MUCH more likely to have a C-section compared to Syrian women. Given that Lebanese women are in general less vulnerable than the Syrian mothers, this suggests that the percentages of C-sections are not related to pre-natal care or difficult births. This is triangulated from the fact that the other factors that are statistically significant are literacy levels and early marriage. Women who are literate and who married over the age of 18 were MORE likely to have C-sections. SDC coverage area did not make a difference in terms of whether a mother had a C-section. Although technically there is a statistically significant difference between the highest and lowest SDCs, it is largely illusory. Britel SDC is slightly higher than the other SDCs and Talia is slightly lower than the other SDCs. Neither difference by themselves is statistically significant, but when combined together, they are just exceeding the margin of error. This is somewhat logical because according to the surveys, the vast majority of respondents reported that they had C-sections because they were ordered by the doctor – it was not a patient choice. Therefore, awareness raising activities among targeted populations should not influence C-section behaviour unless the activities were towards doctors. However, it is unusual that if doctors are driving C-section deliveries, that educated Lebanese women were more likely to have C-sections compared to other populations.

Multi-Year Observations: On the other hand, in the multi-year analysis, over time, the percentage of Syrian mothers who have had C-sections has declined from 2016 (9.5 ppt) although the percentage of Lebanese mothers who had C-sections remained stable (fluctuations within the margin of error) since a drop in 2016 to 2017. When asked why they had had a C-section, the overwhelming majority said it was due to a medical need. **Less than 10% of the sample who had had a C-section said it was due to a personal preference.** These patterns have to be taken with some caution because self-reporting on medical conditions by mothers may not be reliable because mothers may not know what actually constitutes a difficult birth. What is more likely the most that can be inferred from these responses is that the mothers are noting that the decision for a C-section was taken by the doctor and was not a personal choice of the mother.

Indicator 15: Percent of mothers with children under two who received a health booklet.

Table 44: Percentage of mothers with children under two who received a health booklet.

Nationality	2020	2019	2018[56]	Multi-Year Pattern
Syrian	80.0	71.7	68.7	Increasing
Lebanese	97.3	94.7	91.9	Increasing

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[54] Green = Significant
[55] Only applicable when statistically significant
[56] Question first included in 2018 survey.

Table 45: 2020 Demographic comparisons against receiving a health booklet.

Demographic	Significance (Y/N)[57]	Percentage Point Difference[58]	Comment
Nationality		17.3	
SDC		9.4	Not really significant. Britel just slightly higher than the rest and Kabelias just slightly lower than the rest.
Catchment			
Literacy		7.8	Mothers who cannot read or write were less likely to report having a health booklet
Marriage			
Participation		5.2	Participation in Medair activities just at the margin of error boundary.

2020 Observations: There are important differences in access to health booklets. **Syrian women are much less likely (only 80%) to have received a health booklet while essentially all Lebanese women reported receiving one**. Beside nationality, the only real effect of demographic variables is related to literacy levels. Women who could not read or write were less likely to report receiving a health booklet. Participation in Medair activities did show a slight difference although it was right on the boundary of the confidence intervals. It does appear that Medair activities are having a slight contribution in terms of having women be more aware of the need for a health booklet which might be indirectly related to women asking more specifically in the hospitals and clinics for their booklet. Women who cannot read or write are also less likely to know, and request, their health booklets. **However, the relatively small effects of Medair activities and literacy compared to the very large nationality effect suggests that a more likely factor may be that Syrian women are not being treated as well in the hospitals or SDCs**. In addition, when controlling for where a mother gave birth, Lebanese women reported similar percentages of receiving booklets regardless of location, but Syrian women were 10 ppt LESS likely to receive a health booklet when giving birth at an clinic than at a hospital. It may also be worthwhile to consider additional future programming support to clinics as well in terms of distribution of health booklets.

Multi-year observations: Positively, there has been an increase in women reporting receiving a health booklet. The increase is much greater among Syrian women (11.3 ppt) than Lebanese (6.6 ppt). This suggests that there have been gains in terms of the quality of the health care systems over the life cycle of the project.

Indicator 16: Percent of mothers with children under two who stayed at hospital at least 24 hours after delivery.

Table 46: Percentage of mothers with children under two who stayed at least 24 hours.

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	13.9	17.4	17.8	19.7	22.0	Decline
Lebanese	32.4	41.5	39.8	34.0	34.3	Volatile but stable

Table 47: 2020 Demographic comparisons against staying at least 24 hours.

Demographic	Significance (Y/N)[59]	Percentage Point Difference[60]	Comment
Nationality		18.5	
SDC		8.5	Not really practically significant. Kabelias lowest and Britel highest.

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[57] Green = Significant
[58] Only applicable when statistically significant
[59] Green = Significant
[60] Only applicable when statistically significant

Catchment			
Literacy		9.0	
Marriage		6.3	
Participation			

2020 Observations: The percentages of mothers with children under two years of age who stay in the hospital for more than 24 hours is surprisingly low given the importance placed on proper treatment after delivery in the MoPH guidelines. The actual standard is even higher than 24 hours so the baseline expectation for this indicator is still below health standard levels. Very **few women reported staying a sufficient length of time in the hospital, especially for Syrian mothers**. Even among Lebanese mothers, only about a third reported staying more than 24 hours. There was a difference among women who had had a C-section compared to a normal birth with 46% of C-section deliveries staying more than 24 hours and only 4% of normal births staying more than 24 hours. However, this is still concerning because this implies that even among C-section deliveries, more than half were discharged in under a day. Literacy levels and early marriage were also significant influences on length of stay. Women who could not read or write and women who were married young were discharged earlier. Since discharge is normally taken at the decision of the doctor or nurse rather than the mother, **the observed differences in nationality, literacy, and early marriage may be more indicative of the treatment of vulnerable women in the institutions rather than the knowledge or behaviour of the women themselves**.

Multi-Year Observations: Of concern, it appears that the health system is deteriorating since 2016 in this regard. **The percentage of mothers reporting staying in hospital for more than 24 hours has declined for Syrian mothers since 2016** (-8.1 ppt). The percentage of Lebanese mothers staying more than 24 hours is volatile across the project cycle but has ended in 2020 with similar percentages reported in 2016. **The decline over time may be a reflection of strained capacity of the health care system** because the percentage of mothers giving birth in hospitals and clinics has increased since 2016. This suggests programming support to strengthening the capacity of health care system to be able to support adequate length of stay would be important to maintain.

4.2.6   Post-Natal Care (PNC)

Post-Natal care is important in terms of both timeliness and frequency. The most important factor is how early the first postnatal check occurs. Because of this, this dimension is measured through four questions. First, whether *the child* was examined by a health worker after delivery. Then, whether the mother received a Post-Partum Care (PPC) Visit within three days and within two weeks from delivery. Finally, whether the mother received at least three post-partum visits within 40 days of delivery.

Indicator 17:   Percent of mothers with children under two whose child was examined three days after delivery[61]

Table 48: Percentage of mothers with children under two – child examined three days after birth.

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	3.2	7.4	3.9	4.4	NA	Stable
Lebanese	4.5	5.5	8.1	7.1	NA	Stable

2020 Observations: This indicator could be answered in multiple ways depending on which survey questions were used. The indicator values reported here are those responses from the question "when did your new-born receive a medical check?" and the option "within three days". It should be noted that **almost all the mothers reported that their new-born received a medical check after the delivery**. Therefore, this question is specifically asking whether they had received ANOTHER medical check after delivery within 72 hours. In terms of the 72 hours, this percentage was much smaller. **Only 3.2% of Syrians and 4.5% of Lebanese mothers reported that their child received another**

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[61] In the order of the logframe, this is the second PNC indicator, but is described first because of timing from birth

examination within three days of birth. Because of the very small percentages, there were no demographic factors that influenced the distribution.

Multi-Year Observations: Relatively little can be inferred from the multi-year analysis. Although the values fluctuate slightly from year to year, **women reporting their child receiving a medical check within three days remained well under 10% for both Syrians and Lebanese** and never exceeded the margin of error. Baseline and endline values remained nearly the same. It appears that the responses to this question remain low and consistent across the years.

Indicator 18: Percent of mothers with children under two who received a post-partum visit within two weeks.

Table 49: Percentage of mothers with PP visit within two weeks

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	80.1	75.3	84.4	84.5	50.0	Stable after 2016
Lebanese	84.4	79.4	83.5	87.9	62.1	Stable after 2016

Table 50: Where mothers received their PNC services.

		Dispensary	Clinic	Hospital
Syrian	2016	12.1	20.7	32.8
	2017	11.2	11.2	7.6
	2018	42.4	17.9	32.4
	2019	45.1	26.8	27.2
	2020	59.5	18.6	23.1
Lebanese	2016	5.3	26.3	64.2
	2017	6.4	22.3	20.6
	2018	12.1	55.1	27.5
	2019	6.3	70.2	24.3
	2020	17.8	61.8	26.1

Table 51: 2020 Demographic comparisons against PPC visit within two weeks.

Demographic	Significance (Y/N)[62]	Percentage Point Difference[63]	Comment
Nationality			
SDC		12.8	Kabelias lowest, Britel highest
Catchment			
Literacy			
Marriage			
Participation			

2020 Observations: **The percentage of mothers who reported a PPC visit within two weeks is high for both Syrians and Lebanese (more than 80%).** In 2020, most Syrian mothers went to dispensaries for their PNC care (59.5). Most Lebanese mothers (61.8%) went to clinics. However, for both nationalities, a significant percentage was found for all three main options (dispensary, clinic, hospital). Less than 10% reported using a doctor outside of these three venues, and less than 1% reported using any other option. No social factor had any influence on the patterns of the responses except for the SDCs where there was a 12.8 ppt spread between Kabelias (lowest) and Britel (highest).

Multi-Year Observations: For both Syrians and Lebanese mothers, the percentage reporting **a PPC visit within the first two weeks held stable across the cycle from 2017 at around 80-85% of the**

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[62] Green = Significant
[63] Only applicable when statistically significant

sample for both populations. There was an odd movement in both Syrians and Lebanese that from 2016 to 2017, there was a more than 35 ppt increase in terms of reporting having received a PPC visit within the first two weeks. This could either be due to changes in the survey or sampling between 2016 to 2017 or it may reflect a sudden shift brought about by an increased emphasis on PPC visits. However, the fact that there was little subsequent change in the ensuing years – stable within the margin of error – suggests that the former possible explanation may be more likely.

There is an interesting trend with respect to the patterns of where the mothers received their PNC services. Initially, hospitals served as one of the more significant sources for PNC, but then this shifted over the cycle to PNC support coming from dispensaries or clinics. **Among Syrian women, there was a significant surge over the project cycle in the use of dispensaries (47.4 ppt increase since 2016). For Lebanese mothers, there was a similar surge in the use of clinics (43.9 ppt increase since 2016).** This is encouraging because it suggests that the clinics and dispensaries are playing an important role in reducing the strain on the health care systems of hospitals by providing more PPC services.

Indicator 19: Percent of mothers with children under two who received at least three post-partum visit within 40 days.

Table 52: Percentage of mothers with three PPC visits within 40 days

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	3.1	6.9	4.5	NA	NA	Stable
Lebanese	8.9	11.2	10.8	NA	NA	Stable

Table 53: 2020 Demographic comparisons against three-day examination

Demographic	Significance (Y/N)[64]	Percentage Point Difference[65]	Comment
Nationality		5.8	Just slightly more than the confidence interval
SDC			
Catchment			
Literacy			
Marriage			
Participation			

2020 Observations: **The patterns for this indicator suggest that while mothers may receive one PNC visit within two weeks (indicator 17), they do not receive the full complement of PPC visits**. For both Syrians and Lebanese mothers, fewer than 10% of the respondents reported receiving three PPC visits in 40 days. Syrian women were much less likely to receive three full visits compared to Lebanese (-5.8 ppt), but both groups were low. Except for nationality, no other social factor influenced the patterns in the responses. Likely because the values were quite low.

Multi-Year Observations: **The multi-year patterns are stable across the project cycle.** The questions were phrased differently in the 2016 and 2017 surveys, but from 2018 to 2020, the percentages fluctuated within the margin of error. Nationality was a consistent factor with Lebanese women about 5 ppt more likely to report receiving three PPC visits, but for both groups, the values were usually in the 10% range or less. **This suggests that there has not been much change over time in women being able to access more PPC visits.**

Almost all women have their children receive a medical check on delivery and almost all women have one PNC visit. However, **subsequent medical checks for the child or PPC visits for the mothers are not sustained after this.** Barriers to access to three PPC visits have not been part of the survey, but identifying these barriers – whether systemic, load, or attitudinal – could be an important priority in future programming activities.

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[64] Green = Significant
[65] Only applicable when statistically significant

4.2.7 Breastfeeding

This dimension is assessed three indicators which explore the degree that exclusive breastfeeding is practiced and the degree to which mothers practices "early initiation breastfeeding" within the first hour after delivery. The logframe focuses on assessing these factors for mothers of infants in the 0-6 months age range only. **Two of the indicators use different methods to calculate exclusive breastfeeding**. The first is to ask the mother whether they breastfed exclusively for the first six months. The second method assesses exclusivity within the past 24 hours. Standard estimation for exclusive breastfeeding is the 24-hour recall method. The 6-month recall approach was used to estimate trends over time.

Indicator 20: Percent of mothers with children 7-23 months who breastfed their child within one hour of delivery[66]

Table 54: Percentage of mothers who report breastfeeding within one hour[67]

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	93.9	74.6	86.1	73.8	68.3	Volatile, but Increasing
Lebanese	90.3	78.7	83.3	85.4	80.6	Volatile, but Increasing

2020 Observations: Almost all mothers reported breastfeeding their child within the first hour. **Among Syrian mothers, 93.9 reported nursing either immediately or within an hour. Lebanese respondents were similar although slightly lower.** There were essentially only 106 women in the sample who did not breastfeed within one hour. The most commonly cited reason – about half – was exhaustion with an additional 31% saying that either they were not given the infant within the time period or they had no milk. Only 1 person said that they didn't want to breastfeed. There were no social factors that affected the distribution of responses. Mothers are providing early breastfeeding at appropriately high rates.

Multi-Year Observations: **For both Syrian and Lebanese mothers, the percentage reporting immediate breastfeeding has increased since 2016.** The percentages are volatile from year to year with some significant fluctuations greater than the margin of error. However, when compared to the baseline in 2016, there is a change of 25.6 ppt for Syrian women and 9.7 ppt among Lebanese women. At the beginning of the cycle, **in 2016 Syrian mothers were much less likely to breastfeed within one hour of delivery compared to the Lebanese mothers, but by 2018, this difference had disappeared, and rates remained equivalent through 2020.** This is positive in that it suggests that Syrian mothers were changing behaviours during the first part of the cycle.

Indicator 21: Percent of mothers with children 0-6 months who exclusively breastfed (method 1)

Table 55: Percentage of mothers who report breastfeeding their child.

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	93.6	93.9	91.8	90.5	88.5	Increasing
Lebanese	86.8	82.1	87.0	75.0	89.7	Stable

Table 56: Percent reporting responses for why not breastfeeding.

	Year	No milk	Not convenient	Prefer formula	Other
Syrian	2016	66.7%	7.4%	3.7%	22.2%
	2017	78.8%	8.8%	5.0%	7.5%
	2018	85.3%		3.9%	10.9%
	2019	67.1%	5.1%	6.3%	21.5%
	2020	71.4%	2.6%	10.4%	15.6%

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[66] This indicator is listed last in the order in the project logframe but discussed first because of timing from delivery

[67] For those with children between 7-23 months

	2016	71.4%	4.8%	4.8%	19.0%
	2017	72.5%	4.9%	6.3%	16.2%
Lebanese	2018	70.3%	2.7%	6.3%	20.7%
	2019	64.2%	6.0%	11.9%	17.9%
	2020	83.6%	1.8%	5.5%	9.1%

Table 57: Percentage of mothers who report breastfeeding their child for six months[68]

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	80.9	83.0	24.3	NA	NA	Stable from 2019
Lebanese	84.8	76.4	18.7	NA	NA	Increasing from 2019

Table 58: Percentage of mothers who report exclusive breastfeeding for six months[69]

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	10.5	7.8	28.7	NA	NA	Volatile
Lebanese	7.8	4.6	21.2	NA	NA	Volatile

2020 Observations: Patterns in these three tables explore: a) whether the mother breastfed at all, b) for how long they breastfed, and c) whether they did so exclusively. **The overall patterns are that while the vast majority of mothers do breastfeed and for six months, exclusive breastfeeding is not common**. Most mothers reported breastfeeding their child at least some of the time including 93.6% of Syrian mothers and 86.8% of Lebanese mothers. More than 80% of mothers also reported that they breastfed their child for six months. However, the percentage of mothers who practiced exclusive breastfeeding using the Method 1 calculation was very low. Only 10.5% of Syrian mothers and 7.8% of Lebanese mothers reported practicing exclusive breastfeeding in the method 1 calculation. None of the social factors influenced exclusive breastfeeding. There appears to be much more than could be done to strengthen exclusive breastfeeding practices in future programming.

Multi-Year Observations: The same patterns for 2020 hold true across the entire project cycle year. **A substantive majority breastfeed, and most of these for an appropriate length, but exclusive breastfeeding is not common**. The patterns across the years are volatile. A relatively high percentage of mothers reported breastfeeding (91.5% total in 2020). Syrian women were more likely to breastfeed than Lebanese women with a 2020 difference of 7 ppt. Although the Syrian mothers reported a slight increase from year to year in breastfeeding since 2016, the degree of change from 2016-2020 still lies within the margin of error yet. For Lebanese mothers, the percentage breastfeeding was volatile, but also stable with 2016 and 2020 values within the margin of error.

The reasons given for not breastfeeding tended mostly be due to lack of milk. Among those giving a reason for not breastfeeding, between 65%-85% reported that it was due to no milk. While the WHO has expressed concern that the uncontrolled distribution of infant formula can lead mothers to develop a preference for formula, this was not commonly reported in the surveys. In any given year, only about 15-20 mothers – out of the entire sample – would say that they did not breastfeed because they preferred formula. The evidence suggests that mothers in the surveys are willing to breastfeed and the failure to reach 100% is not primarily due to attitudinal issues, but rather to physical issues (lack of milk). Awareness raising campaigns to increase breastfeeding are therefore not likely to see much sign of changes.

The percentage of mothers practicing exclusive breastfeeding is another thing. The percentage of mothers who reported breastfeeding their child for six months had an unusually high surge from 2018 to 2019 which is likely more reflective of a survey change than really reflecting a 60 ppt increase in mothers breastfeeding. **From 2019, the values were stable from 2019 to 2020 for Syrian women and increased slightly (8.4 ppt) for Lebanese women**. Across the multi-year period, the fluctuations are volatile with no clear pattern emerging. The volatility from year to year is usually related to either changes in the sampling or survey questions or else it is a question that is technically unreliable. Self-

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[68] Or are still breastfeeding their child

[69] Asked of women over six months regarding behaviour of youngest child first six months

report on memory across a six-month period is likely to be unreliable because respondents may not remember details over that span and therefore, answers will become more erratic. **What can be inferred is that while a substantive majority of women reported breastfeeding and for an appropriate length of time, but exclusive breastfeeding is rare.**

Indicator 22: Percent of mothers with children 0-6 months who are exclusively breastfed (method 2)

Table 59: Percentage of mothers who report exclusive breastfeeding last 24 hours[70]

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	39.7	35.7	NA	NA	NA	Stable
Lebanese	39.5	26.1	NA	NA	NA	Increasing

Table 60: 2020 Demographic comparisons against exclusive breastfeeding last 24 hours

Demographic	Significance (Y/N)[71]	Percentage Point Difference[72]	Comment
Nationality			
SDC		19.7	Kabelias lowest, Britel highest
Catchment			
Literacy			
Marriage			
Participation			

2020 Observations: The percentage of mothers who reported exclusive breastfeeding over the past 24 hours is higher than those that reported breastfeeding exclusively for 0-6 months. **Around 40% of both Syrian and Lebanese mothers reported exclusive 24-hour breastfeeding** and there was no difference among the nationalities. There was some variation among the SDCs in terms of reporting exclusive 24-hour breastfeeding. Three of the SDC areas (Talia, Marj, and Kabelias) reported similar percentages in the 30% range. Britel and Joub Janine by contrast were about 10-15 ppt higher. No other social factor affected breastfeeding behaviour.

Multi-Year Observations: There is relatively little that can be extracted from the multi-year analysis because the data in the datasets for this calculation is only for 2019 and 2020. **Syrian mothers remained stable (within the margin of error) for 24-hour exclusive breastfeeding while Lebanese mothers increased about 13.4 ppt.** Combined with the data from the other exclusive breastfeeding calculation, the data suggests that while women will breastfeed for an appropriate length of time, long-term exclusive breastfeeding is rare. **However, they will practice short term periodic exclusivity throughout the time period that they are nursing**. This suggests that there is potential to increase the frequency of periodic exclusivity throughout the first six months through future programming activities.

4.2.8 Family Planning

The Family Planning (FP) dimension is centered around four indicators – two of which measure actions (FP discussions with service providers and contraception use) and two which measure knowledge (appropriate birth spacing and risks of rapid pregnancies).

Technical note: The first two indicators (FP discussion and Contraception Use) have been consistently reported incorrectly in past annual reports and requires some nuanced explanation. In the survey, there are two questions related to FP discussions. The first, which was included in all surveys from 2016-2020, is simply asking whether the mother had had an FP discussion with someone in the past year. In 2018, a new question was added asking specifically with whom they discussed and included options such as trained service providers (Doctors, nurses, midwives) and also non-trained

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[70] Asked of women only with children 0-6 months
[71] Green = Significant
[72] Only applicable when statistically significant

options such as family or friends. However, the second question only recorded the percentages **among those who had already reported having a discussion**. So technically, the second question is showing the **SHARE** of the women who had had a discussion about FP that had actually had this discussion with a trained provider. As an example. In 2020, 29.5% of Syrian mothers reported having a discussion about FP. However, the vast majority (70%+) of these discussions were with non-trained service providers such as family or friends. Of the 29.5% of Syrian women who had a discussion, only 29.3% of those had had the discussion with a trained service provider. This means that only 8.6% of all Syrian women in the 2020 sample had had a discussion with a trained service provider on FP (29.3% of 29.5% of Syrian women in the sample). Therefore, in order to specifically answer the indicator question, one has to calculate the number of women who reported having a discussion with a trained service provider *against the entire sample*, not just against those who said yes to the first FP question. **This was a mistake in the coding of the survey that should be rectified in future programme monitoring**.

The same issue occurs with the survey question on contraception usage. There is one question that asks the mothers whether they are doing anything to delay pregnancy and then a second question asking which types of method they are using – some of which are modern methods (pills, condoms) and some of which are not (withdrawal, counting). To answer the question regarding the use of modern methods, the calculation must be the sum of all respondents reporting a modern method *against the entire sample*, not merely as the share of respondents that are reporting doing something. **This was a mistake in the coding of the survey that should be rectified in future programme monitoring**.

Indicator 23: Percent of mothers who report discussing FP with trained service provider.

Table 61: Percentage of mothers who report discussing FP.

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	29.5	31.6	21.2	22.0	24.3	Increasing
Lebanese	35.0	31.1	24.2	26.4	29.1	Increasing

Table 62: Share of mothers who report discussing FP who did so with a trained service provider.

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	29.3	20.9	31.2	NA	NA	Volatile
Lebanese	35.8	21.6	44.5	NA	NA	Volatile

Table 63: Percentage of mothers who only report discussing FP with a trained service provider.

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	8.6	6.6	6.6	NA	NA	Stable
Lebanese	12.5	6.7	10.8	NA	NA	Stable

Table 64: 2020 Demographic comparisons against share of FP discussions with provider

Demographic	Significance (Y/N)[73]	Percentage Point Difference[74]	Comment
Nationality		5.5	Lebanese more likely to discuss with trained provider than Syrians
SDC		15.5	Marj lowest, Kabelias highest
Catchment		11.7	Those living outside the catchment area more likely to discuss with trained service provider
Literacy			
Marriage			
Participation		9.5	Participation in Medair activities more likely to have discussions with trained providers

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[73] Green = Significant
[74] Only applicable when statistically significant

2020 Observations: When controlling for the nuance described in the preceding technical note, the results show that very few women reported having FP discussions with trained providers. About one third of both Syrian and Lebanese mothers reported having FP discussions, but the majority of these were with non-trained providers. **Only 8.6% of Syrian mothers and 12.5% of Lebanese mothers in the sample actually reported talking with a trained service provider (doctor, nurse, or midwife).** Only 1.4% of the sample reported that they had wanted family planning discussions and had not been able to have them, so **this suggests that the low percentages are not an issue of access, but rather interest.** Lebanese mothers were more likely to discuss with a trained prover than Syrian mothers (5.5 ppt). Among the SDCs, there was a fairly widespread among the SDCs with Marj having the lowest percentage and Kabelias the highest. Interestingly, those living outside the catchment areas were more likely to have a higher share reporting a discussion with a trained service provider than those living inside the catchment areas. This was to a much greater degree than just nationality distribution would explain and may imply that there are other FP resources available in the broader context than just the SDCs and Medair activities. **Participation in Medair activities did have a strong influence on the share of mothers who sought FP discussions with trained service providers**. This suggests that this could be an important point of focus in future programming activities that could lead to changes in FP discussion behaviour.

Multi-Year Observations: The patterns across the five-year sample do suggest **that there is an increase in the percentage of women reporting having an FP discussion**. The pattern in both Syrians and Lebanese is that the percentages are stable for the first three years from 2016-2018 with fluctuations within the margin of error from year to year. However, then from 2018, there is a continuous increase to 2020 levels. This is positive in that it suggests that some actions taken around the 2018 period led to an increase percentage of women seeking out FP discussions compared to the beginning of the project cycle. However, the percentage of **mothers seeking out trained service providers has stayed relatively low.** It remained stable for Syrian women and was volatile, but low, for Lebanese mothers. The patterns in the data imply that there is increasing awareness of the importance of having FP discussions but the mothers in the sample have largely focused these conversations with non-trained service providers. The relatively low percentages suggest that there is value in future programming activities for both generating awareness of the importance of having FP discussions AND for facilitating access to trained service providers for these conversations.

Indicator 24: Percent of mothers with children under two years who report using a modern contraceptive method.

Table 65: Percentage of mothers with children under two who report using *any* method.

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	33.7	33.6	36.9	43.8	36.6	Stable
Lebanese	53.9	53.4	58.6	45.9	56.2	Stable

Table 66: Percentage of mothers[75] who report only using a modern method.

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	16.7	18.1	15.8	26.5	16.8	Stable
Lebanese	27.3	22.3	27.3	25.0	27.8	Stable

Table 67: 2020 Demographic comparisons against using modern methods with children under two.

Demographic	Significance (Y/N)[76]	Percentage Point Difference[77]	Comment
Nationality	 	11.6	Lebanese more likely to use modern methods
SDC			
Catchment			

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[75] With children under two years
[76] Green = Significant
[77] Only applicable when statistically significant

Literacy			
Marriage			
Participation	 	6.3	Participation in Medair activities more likely to use modern methods.

2020 Observations: When taking into account the nuance described in the preceding technical note, the patterns in the results show that **relatively few mothers with children under two are using a modern form of contraception**. About half of Lebanese mothers with children under two (53.9%) reported using some form of delayed pregnancy but only 27.3% of Lebanese mothers were using a modern contraceptive method. One third of Syrian mothers (33.7%) used some method, but only 16.7% were using a modern method. **Interestingly, mothers with children over two years of age were MORE likely to be using modern contraception methods than mothers with children under two.** This was a 10 ppt difference for Syrian mothers and a 7 ppt difference for Lebanese mothers. The logic in the indicator is that mothers with children under two would be using some form of delayed pregnancy to promote improved birth spacing, but for some reason, it seems that mothers with older young children are actually using modern methods more frequently.

For why they may not be using a contraceptive method for delayed pregnancy, the most common reasons given were that they were breastfeeding (29%), did not like birth control methods (23.8%) or were already pregnant (19.7%). The first two factors are of concern because they suggest that more awareness raising, and training are required. As noted in the 2019 annual report, breastfeeding is not a reliable method for controlling pregnancy unless carried out under certain conditions[78] which makes it an unreliable option for most mothers. Further, disliking birth control methods is not enough reason to not pursue some form of birth spacing practices.

Among the social factors, **nationality made a major difference**. Lebanese mothers were more likely to report using some form of delayed pregnancy (20 ppt difference) and were more likely to be using modern methods (11.6 ppt). No other social factors were statistically significant except for participation in Medair activities. **Participation in Medair activities did influence the likelihood that the respondent was using a modern contraception method** (6.3 ppt). This suggests that there would be value in continuing to emphasize contraception usage within future programming activities.

Multi-Year Observations: Although participation in Medair activities does seem to be related to increased use of modern contraception methods in 2020, the multi-year patterns suggest that **there have been no macro-level changes in delayed pregnancy practice among the targeted populations**. The 2017 dataset is unusual compared to the other years with a substantive dip in reported usage by Lebanese mothers combined with a substantive increase in Syrian mothers. With the exception of that one year, the pattern for both Syrians and Lebanese holds stable, only fluctuating within the margin of error. Lebanese mothers remained about 20 ppt more likely to use any method and about 10 ppt more likely to use a modern method than Syrian mothers throughout the years. The relatively high stability suggests that there has been little actual change in behaviours regardless of the project activities carried out and suggests there may be either systemic barriers or further knowledge barriers that need to be addressed. The systemic barriers do not appear to be related to cultural values. **Only a very low percentage of mothers reported that a reason for not using a contraceptive method was that they themselves wanted more children (less than 10%) or that their husband wanted more children (also less than 10%).** The fact that the most commonly reported reason given for all years was because they were breastfeeding suggests that knowledge may be more of a barrier and could be a source of further future programming.

Indicator 25: Percent of mothers with children under two years who can cite at least one risk of getting pregnant.

Table 68: Percentage of mothers with children under two who cite at least one risk.

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[78] The mother must practice exclusive breastfeeding, breastfeeds at least every four hours during the day and six hours at night, the child is less than six months old, and the mother has not started her monthly period.

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	72.8	69.0	46.8	72.2	49.5	Volatile plateaus
Lebanese	84.8	75.7	68.6	80.6	70.6	Volatile plateaus

Table 69: 2020 Demographic comparisons against citing at least one risk.

Demographic	Significance (Y/N)[79]	Percentage Point Difference[80]	Comment
Nationality		12 ppt	Lebanese mothers more likely to know at least one risk
SDC			
Catchment			
Literacy			
Marriage			
Participation			

2020 Observations: A substantive percentage of mothers were aware of the risks of pregnancy within two years of last delivery. **About three quarters of Syrian mothers with children under two (72.8%) could cite at least one risk while Lebanese mothers performed even better (84.8%).** This percentage held stable when comparing between those women with children under two years and those women with children over two. This is interesting because the implication is that even though both younger and older women[81] are aware of the risks in the same proportion, women whose children are older than two years are more likely to actually practice delayed pregnancy compared to women whose children are younger than two. **Even though women with children under two are more at risk if pregnancy happens**. This dynamic may be important to explore in future programming activities given that it does not seem to be related to being required to, or wanting to have, more children.

Only nationality made a difference among the social factors. Lebanese mothers were about 12 ppt more likely to be able to cite at least one risk. It is interesting that participation in Medair activities does improve using modern contraception methods but does not change risk factor knowledge. This suggests that women are generally already aware of pregnancy risks, so the added value of the Medair activities is connected to something that helps women overcome some other barrier besides lack of knowledge to actually practice contraception to avoid the risks.

Multi-Year Observations: The multi-year patterns across the cycle are volatile but *might* show an increase in knowledge of pregnancy risks. However, the volatility is odd. The 2016 and 2018 values were quite low, and similar to each other. The 2017, 2019, and 2020 values were much higher, and also similar to each other. The presence of two 'plateaus' in the data pattern in unconnected years – for both Lebanese and Syrian women – suggests that the likeliest explanation is related to a technical issue with sampling or the survey application rather than showing true changes in women's knowledge. What can be concluded from the data is that the 2020 endpoints reflect relatively high values. When combined with the 2020 observations, there are some programming implications. **Activities intended to raise awareness concerning the risks of pregnancy are unlikely to show much success because women already know the risks.** The issue is more around the question of *why* women still do not pursue methods to delay pregnancy even if they know the risks – and the reasons for this are NOT because the husband wants more children, or the mother wants more children.

Indicator 26: Percent of mothers with children under two years who know correct birth spacing.

Table 70: Percentage of mothers with children under two who know correct birth spacing[82]

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[79] Green = Significant

[80] Only applicable when statistically significant

[81] More accurately, mothers whose youngest child is under two years of age compared to mothers whose youngest child is more than two years of age.

[82] Only percent of respondents who

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	30.0	42.1	32.7	48.1	41.1	Volatile plateaus
Lebanese	41.8	60.9	48.6	60.5	68.5	Volatile plateaus

Table 71: 2020 Demographic comparisons against correct birth spacing.

Demographic	Significance (Y/N)[83]	Percentage Point Difference[84]	Comment
Nationality		11.8	Lebanese more likely to know correct birth spacing
SDC		19.9	Talia and Marj lowest, Joub Janine and Kabelias highest
Catchment			
Literacy		6.4	Women who cannot read or write less likely to know birth spacing
Marriage			
Participation			

2020 Observations: Only a minority of mothers overall were able to correctly cite appropriate birth spacing. Syrian mothers were much less likely to be able to report correct birth spacing (-11.8 ppt), but both groups were less than 50%. Somewhat unusually, a greater percentage of Lebanese mothers with children OVER two were able to cite proper birth spacing than mothers with children under two (10 ppt difference), but for Syrian women, it did not matter the age of the child. Only about one-third of Syrian mothers (30.0%) were able to cite the correct birth spacing.

Besides nationality, there was a substantive variation among the SDCs with Marj and Talia having the lowest percentages (lower 20%) while Joub Janine and Kabelias had the highest percentages (low 40%). **Women who could not read and write were less likely to be able to cite correct birth spacing (-6.4 ppt).** There were no differences among the other social factors. Participation in Medair activities did not make a difference. Somewhat unusually, it appears to be the case in Family Planning is that **participation in Medair activities influences changes in behaviour (FP discussions and Contraception) but does not influence changes in knowledge (Pregnancy risks and birth spacing).** Normally, project activities are better at changing knowledge than practices, so this dynamic with respect to family planning is worth exploring further.

Multi-Year Observations: As with pregnancy risks, the multi-year patterns show two volatile plateaus that are probably more linked to survey or sampling issues than to actual changes in women's knowledge. In this case, the patterns are reversed from the previous indicator. In 2018 and 2020, the percentages of correct birth spacing are much lower (but similar to each other), than the percentages in 2016, 2017, and 2019. The patterns are the same for both Syrians and Lebanese as well. Overall, because of this volatile plateau dynamic, **it does not seem that there have been changes to birth spacing knowledge over the project cycle**. **Lebanese mothers are consistently more likely to be able to cite correct birth spacing than Syrian mothers**. The degree of difference holds consistent between 10-15 ppt each year as well.

4.2.9   Vaccinations

Vaccination coverage is an important priority among health programming. There are four indicators tracking vaccination coverage. Three of the indicators track individual vaccinations: Measles, Polio, Diphtheria and Pertussis and Tetanus (DPT). The other indicator is a synthesis asking the percentage of children who have received age-appropriate vaccinations. The survey, based on the MoPH calendar guidelines, tracks 15 vaccinations to measure age-appropriateness.

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[83] Green = Significant
[84] Only applicable when statistically significant

Technical Note I – Over-reporting coverage: One important consideration when interpreting this data is that the survey only records the percentage of vaccinations among those mothers who can produce a vaccination booklet for their child and who give permission for Medair enumerators to copy the data. This is a technically correct approach and a standard practice to mitigate the unreliability of memory recall of 15 different vaccinations. **However, among this population, this method will substantively over-report the true level of vaccination coverage among the children because very few mothers actually have health booklets**. For example, in the 2020 dataset, among the children ages 1-5, only 43% had a vaccination booklet. Previous years are volatile, but never exceeded 58% of children 1-5. This means that in any given year, between 40-60% of the children are not being measured at all. This needs to be taken into account in interpreting the results because whatever the situation may be for children with the vaccination booklets, it will likely be much lower for all children.

Technical Note II – Under-reporting age-appropriate coverage: One of the indicators is specifically asking for the percentage of children aged 12-23 months who received age-appropriate vaccination at the time of the survey. By the end of 23 months, there are 15 age-appropriate vaccinations according to the MoPH calendar. Twelve of these to be administered before Month 17 and three others before months 23. **Reporting only for children who are currently in the age range of 12-23 months will under-report true vaccination coverage.** For example, a child may be 13 months, and therefore in the age range, but might receive the vaccinations in month 14. As an illustration, in the 2020 dataset, only 4.2% of children between 12-17 months had the recommended 12 vaccines. However, this percentage increased to 23.9% among children ages 18-23 months and even further to 37.7% for children who were older than 24 months. Therefore, to better reflect age-appropriate vaccination coverage, it would be more accurate to record the vaccination rates among children over 24 months. By the end of 24 months, did children get all their recommended vaccinations? Therefore for 2020 and multi-year, the data is recorded from children **over 24 months to measure age-appropriate vaccinations**.

Indicator 27: Percent of children aged 1-5 years who are vaccinated for measles.

Table 72: Percentage of children 1-5 years with vaccination booklet

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	45.1	56.6	50.9	53.1	47.8	Stable but declined 2020
Lebanese	41.1	54.5	50.7	61.9	65.5	Declining

Table 73: Percentage of children 1-5 years vaccinated for measles.

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	54.7	50.8	46.3	71.5	72.7	Declining
Lebanese	67.3	64.4	62.6	82.2	74.9	Declining

Table 74: 2020 Demographic comparisons against measles vaccination

Demographic	Significance (Y/N)[85]	Percentage Point Difference[86]	Comment
Nationality		12.6	Lebanese children more likely to have measles vaccine
SDC			Values stable except Joub Janine 20 ppt higher than the others
Catchment			
Literacy		8.7	
Marriage		7.0	
Participation			

2020 Observations: Of children ages 1-5 years, there were 1843 in the sample of which only 797 could produce a vaccination booklet. **Of those children with a booklet, 54.7% of Syrian children had the measles vaccine and 67.3% of Lebanese children.** Besides nationality, the two factors with most

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[85] Green = Significant
[86] Only applicable when statistically significant

important influence were whether the mothers could read or write and whether they were married early. In both cases, children were less likely to have had the measles vaccine. However, mothers who could not read and write were ALSO less likely to even have a vaccination booklet (-6.6 ppt) whereas there was no difference between the time of marriage. **Therefore, the true coverage of the measles vaccine is even less for children in families where the mother cannot read or write compared to the other vulnerability factors.** The SDCs had relatively similar percentages except for Joub Janine which was 15-20 ppt higher than the other four.

One item of interest is that while participation in Medair activities did not influence the percentages of children with measles vaccine, **participation DID influence whether or not the child had a vaccination booklet (13.1 ppt).** This is encouraging because it means that the Medair activities do appear to help mothers maintain health booklets and this should be an important programming consideration for future activities.

Multi-Year Observations: These vaccines are administered prior to age one for children. The data for children aged 1-5 would reflect the cumulative effect of the previous five years which include data from before the crisis (assuming refugee mothers brought their vaccination booklets when fleeing Syria). There are patterns of concern in the multi-year database for both having a vaccination booklet and for children having measles vaccines. **Few mothers had vaccine booklets and fewer yet in recent years**. There appears to be a slight decline among Syrian mothers (about 8 ppt since 2017) and a steeper decline among Lebanese mothers (20.8 ppt) among mothers who had a vaccine booklet. In addition, there has been a steady decline in for both Syrians and Lebanese children in terms of receiving measles vaccines, even among those with booklets. **Syrian children have declined more (-18 ppt) than Lebanese children (-7.6 ppt).** Given that these reported values are over-reporting the true vaccination coverage to begin with, this decline is of substantive concern. Increased measles vaccination campaigns may be an important point for future programming.

Indicator 28: Percent of children aged 1-5 years who are vaccinated for polio[87]

Table 75: Percentage of children 1-5 years vaccinated for polio.

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	74.1	74.6	66.8	85.1	74.2	Stable
Lebanese	81.6	81.7	78.8	90.4	73.8	Increasing

Table 76: 2020 Demographic comparisons against polio vaccination

Demographic	Significance (Y/N)[88]	Percentage Point Difference[89]	Comment
Nationality		7.5	
SDC		18.8	Talia lowest, Marj highest
Catchment			
Literacy		11.7	
Marriage		7.4	
Participation			

2020 Observations: Children appear to be better vaccinated against polio than measles. **Among Syrian children with vaccine booklets, 74.1% had the polio vaccines.** The rate was even higher among Lebanese children were 81.6%. Besides nationality, there were variations among the SDCs with Talia recording the lowest percentage of polio vaccinations and Marj the highest. Whether the mother could read or write and whether they were married early were both influential, as with measles. **Literacy levels appear to be more influential than early marriage age.** Participation in Medair activities did not influence the patterns of the results.

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[87] There are three vaccinations for DPT plus three boosters. According to MoPH guidelines, DPT 1, 2, 3 should be completed by 17 months and boosters to come afterwards. This data records the percentage of children with the three initial vaccines.
[88] Green = Significant
[89] Only applicable when statistically significant

Multi-Year Observations: These vaccines are administered prior to age one for children. The data for children aged 1-5 would reflect the cumulative effect of the previous five years which include data from before the crisis (assuming refugee mothers brought their vaccination booklets when fleeing Syria). In 2017, the values for both Syrians and Lebanese were unusually high compared to the other years (maybe as a result of having vaccinations before the crisis). However, the percentage of Syrian children who are recorded vaccinated for polio has fluctuated significant among the years, but the 2020 values are similar to the 2016 values. Lebanese children appear to be slightly increasing in terms of percentage vaccinated although the degree of increase is only slightly more than the margin of error when comparing 2016 and 2020. What the patterns suggest is that **there have been relatively little gains among Syrian children in terms of coverage for polio even as Lebanese children appear to be gaining in coverage somewhat.** However, the rates are all higher than for measles as well. It may be helpful to have increased programming focus on polio vaccination coverage as well.

Indicator 29: Percent of children aged 1-5 years who are vaccinated for DPT[90]

Table 77: Percentage of children 1-5 years vaccinated for DPT.

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	70.5	70.8	61.1	78.9	61.4	Increasing
Lebanese	81.0	79.3	74.1	85.7	73.8	Increasing

Table 78: 2020 Demographic comparisons against DPT vaccination

Demographic	Significance (Y/N)[91]	Percentage Point Difference[92]	Comment
Nationality		10.5	
SDC		20.2	Talia lowest and Marj/Joub Janine highest
Catchment			
Literacy		11.2	
Marriage		7.4	
Participation			

2020 Observations: **Among Syrian children 70.5% of children had DPT coverage while 81% of Lebanese.** There is some increase among Syrian children from 2016, in contrast to polio coverage, but the difference is only slightly more than the margin of error (9.1 ppt). Factors are the same as with polio as well. Literacy levels make more of a difference than early marriage, but both are factors. There is a wide range among SDCs with Talia low and Marj/Joub Janine highest. Participation in Medair activities does not appear to influence coverage. **Patterns of responses are mirroring polio vaccination coverage**. This implies that whatever factors are influencing general vaccination coverage are influencing both and measures taken to address one will likely have positive results on the other as well.

Multi-Year Observations: **From 2016, there is a slight increase for both Syrians and Lebanese children in terms of coverage of between 7-9 ppt.** The 2017 values appear unusually high compared to the other years and may again be more reflective of a survey or sampling issue because if it had been a surge in vaccination, the percentages would have held over into the following year as children 1-5 would stay in the sample over time.

Indicator 30: Percent of children with age-appropriate vaccinations[93]

Table 79: Percentage of children age-appropriate vaccinations

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[90] There are three vaccinations for Polio plus three boosters. According to MoPH guidelines, polio 1, 2, 3 should be completed by 17 months and boosters to come afterwards. This data records the percentage of children with the three initial vaccines.
[91] Green = Significant
[92] Only applicable when statistically significant
[93] Recorded from children over 24 months to ensure coverage options completed

Nationality	2020	2019	2018	2017	2016[94]	Multi-Year Pattern
Syrian	22.7	17.3	12.1	37.3	NA	Increasing from 2018
Lebanese	46.2	34.3	21.7	52.1	NA	Increasing from 2018

Table 80: Mean number of vaccines per child

Nationality	2020	2019	2018	2017	2016[95]	Multi-Year Pattern
Syrian	9.8	9.4	8.5	11.4	6.5	Increasing
Lebanese	12.0	11.2	10.3	12.5	7.6	Increasing

Table 81: 2020 Demographic comparisons against age-appropriate vaccination

Demographic	Significance (Y/N)[96]	Percentage Point Difference[97]	Comment
Nationality		23.5	
SDC		22.5	Joub Janine higher than all the rest by 20+ ppt. Others similar to each other
Catchment			
Literacy		12.3	
Marriage		17.6	
Participation			

2020 Observations: Among children with vaccine booklets, only about a third have recorded all age-appropriate vaccinations. There is a substantive difference between nationalities. **Among Syrian children, only 22.7% had all 15 vaccines recommended while 46.2% of Lebanese children did.** The mean number of vaccines recorded from the health booklets was 9.8 vaccines for Syrian children and 12.0 vaccines for Lebanese children. Among the SDCS, rates were relatively similar except for in Joub Janine which recorded rates about 20 ppt. higher than the others. This may reflect a specific vaccination campaign carried out in that SDC coverage area. **Among the other social factors, once again, literacy levels and early marriage were influential for vaccination coverage**. Children of mothers who were married early or who could not read were 12.3 and 17.6 ppt less likely to have the full vaccine coverage compared to children from other mothers. Participation in Medair activities did not change vaccination coverage.

Multi-Year Observations: Although the coverage of measles has declined and the coverage of polio and DPT have held steady, **there has been an increase in overall vaccine coverage**. The percentage of children who had all 15 vaccines has steadily increased since 2018. **The rate of increase is higher among Lebanese children (24 ppt) compared to Syrian children (10 ppt), but both groups are showing positive gains.** The average number of vaccines recorded by each child has also increased. Lebanese children have increased to a greater degree since 2018 than Syrian children (1.7 versus 1.3) but both groups have also seen progress in the overall number of vaccines. Throughout all the years in the cycle**, Lebanese children tend to have about 3 vaccines more on average than Syrian children**. When tracking from 2018, there is no one specific vaccine that is driving this increase, but rather small percentage gains across the range of vaccines. This is encouraging because it suggests that there are positive changes to overall vaccine availability (health system strengthening) or vaccine management in households (awareness raising activities) that are driving the changes over time. Given that participation in Medair activities do not appear to influence the changes, this is likely then an indicator that **the Medair support to SDCs has helped strengthen system coverage for vaccines**.

4.2.10 Sick Child Treatment – Respiratory & Diarrhoea

This section combines three dimensions in the logframe related to behaviour of mothers regarding treatment of sick children with an emphasis on the treatment of acute respiratory infections (ARI) and

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[94] The 2016 survey only asked about 10 vaccinations compared to 15 in other years

[95] The 2016 survey only asked about 10 vaccinations compared to 15 in other years

[96] Green = Significant

[97] Only applicable when statistically significant

diarrhoea. The indicators track cases of ARI and diarrhoea, whether treatment was sought, and type of treatment obtained for each condition.

Section 1: ARI Incidence and Response

Indicator 31: Percent of children that had fast or difficult breathing[98] in last two weeks

Table 82: Percentage of children with Difficult Breathing ONLY

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	6.0	17.9	25.0	28.2	39.2	Decreasing
Lebanese	2.3	10.6	19.2	20.8	40.9	Decreasing

Table 83: Percentage of children with Difficult Breathing OR coughing

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	22.8	38.6	55.7	64.4	75.7	Decreasing
Lebanese	11.7	26.3	49.0	56.5	74.4	Decreasing

Table 84: Percentage of children with Difficult Breathing AND coughing

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	3.6	13.5	20.4	24.1	36.5	Decreasing
Lebanese	1.3	6.9	15.2	18.4	37.0	Decreasing

Table 85: 2020 Demographic comparisons incidence of ARI (coughing or difficulty breathing)

Demographic	Significance (Y/N)[99]	Percentage Point Difference[100]	Comment
Nationality		11.1	Lebanese children had lower incidence rate
SDC		16.6	Marj best rate (lowest), Kabelias highest rate
Catchment			
Literacy		8.6	Higher level of education had lower incidence rate
Marriage			
Participation			

2020 Observations: The logframe indicators for this dimension are phrases as whether the child has cough OR breathing difficulties. These are reported in the following cases. However, ARI is technically measured by whether a child has a cough AND difficulty breathing. This 'AND' measure is shown in Table 84. ARI cases reported were relatively low for severe cases but about one in five children had some sort of ARI incidence in the past two weeks. **Syrian mothers reported a higher difference for both difficult breathing (6.0%) and breathing or coughing (22.8%) compared to Lebanese mothers (2.3% and 11.7%).** Besides a big difference in nationality (11.1 ppt), there were significant variations among SDCs where Marj SDC reported the lowest rates and Kabelias the highest rates. **Whether a mother could read or write affected incidence rates (8.6 ppt).** No other social factor was beyond the margin of error.

Multi-Year Observations: There has been a steep decline since 2016 for ARI cases no matter how these are measured – coughing, difficulty breathing, or coughing AND difficulty breathing. The decline has been at different rates for Syrians versus Lebanese families. In 2016, the reported ARI cases were similar between the two nationalities and quite high. About 75% of the mothers reported ARI incidents in 2016 for both Syrians and Lebanese and about 40% of mothers reporting difficulty breathing (a more severe incident).   This dropped for both Syrians and Lebanese over time, but with Lebanese families, the decline was 62.7 ppt compared to 52.9 ppt for Syrians for coughing or difficulty breathing as stated in the indicators. This patterns suggests two implications. First, there appears to be a general

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[98] The survey includes together difficult breathing AND coughing in a single question.

[99] Green = Significant

[100] Only applicable when statistically significant

improvement in health and hygiene conditions in the overall environment leading to a decline in ARI for all. However, Syrian families are still more vulnerable to ARI incidents compared to Lebanese suggesting that Syrian families are not able to access the overall benefits of this general environment improvements to the same degree as the Lebanese families. This is likely due to the difference between living in an ITS versus a settled community. However, it is positive to see an overall improvement in the entire environmental conditions.

Indicator 32: Percent of children with fast or difficult breathing[101] in last two weeks for whom advice was sought after more than 24 hours.

Technical Note: This indicator as described in the project logframe is a negative framed indicator which can lead to misinterpretations. Ideally, in project evaluation, one is looking for prompt treatment seeking behaviour. In this case, treatment should be sought more quickly for ARI cases, so it would be positive to record the percent that sought treatment *within* 24 hours. Instead, the indicator is negative framed and focusing on measuring the percentage of mothers who *delayed* seeking treatment. Therefore, for interpreting these patterns, the more positive patterns are LOWER percentages recorded for seeking treatment.

The intent of the indicator – although poorly framed – was likely to be to measure whether or not the families sought treatment – and from which facility they obtained the treatment. Therefore, the following tables record both the literal interpretation of the indicator (seeking treatment before or after 24 hours) and the likely real intent of the indicator – how many sought treatment at all and from where.

The survey question on delayed treatment is actually framed somewhat confusingly as "same day" "next day" "two days" and "three or more days". These options could be confusing to mothers because if the child is sick in the evening, they may take the child for treatment in the morning – technically the next day. So "Next day" options could either be inside or outside of a 24-hour window. Therefore, for the purposes of measuring 24 hours (as per the indicator), the options of "same day" AND "next day" are coded to be within 24 hours.

As a reminder, this data is recording the SHARE of mothers who had an ARI incident who then ALSO sought help. This means that the respective confidence intervals are much greater: Syrians 4.9 ppt and Lebanese 9.4 ppt. This makes it challenging to draw too many conclusions regarding patterns.

Table 86: Percentage of ARI incident seeking treatment AFTER 24 hours.

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	18.4	20.2	26.9	19.2	14.2	Stable
Lebanese	10.9	15.1	15.3	6.4	11.0	Stable

Table 87: 2020 Demographic comparisons for ARI treatment seeking.

Demographic	Significance (Y/N)[102]	Percentage Point Difference[103]	Comment
Nationality		21.6	Lebanese more likely to seek treatment
SDC			
Catchment			
Literacy			
Marriage			
Participation			

Table 88: 2020 Demographic comparisons for ARI treatment seeking within 24 hours.

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[101] The survey includes together difficult breathing AND coughing in a single question.
[102] Green = Significant
[103] Only applicable when statistically significant

Demographic	Significance (Y/N)[104]	Percentage Point Difference[105]	Comment
Nationality			
SDC		21.6	Brital most responsive, Janine Joub least responsive
Catchment			
Literacy			
Marriage			
Participation		10.5	Participation in Medair activities linked to MORE likely to delay seeking treatment

2020 Observations: The percentage of mothers seeking treatment was high for both nationalities but especially high for Lebanese mothers. **Three-quarters of Syrian mothers reported that they sought treatment (72.9%) and over 90% of Lebanese mothers reported seeking treatment (93.5%).** In terms of seeking treatment after 24 hours, the percentage of women seeking treatment after 24 hours was low (18.4% for Syrians and 10.9 percent for Lebanese mothers). **Syrian mothers were more likely to delay treatment compared to Lebanese, but this difference was within the confidence intervals** because of the small sample size of those who were actually sick. **With the exception of nationality in 2020, no other social factor influenced seeking treatment.** There were differences among SDCs and Participation in Medair activities for whether seeking treatment was delayed. Britel SDC was the most responsive and Janine Joub were the most likely to delay treatment. **Participation in Medair activities was linked to more likely to delay seeking treatment.**

Multi-Year Observations: The percentage of mothers reporting seeking treatment has held stable across the five-year period. **For most of the project cycle, the percentage of Lebanese mothers and Syrian mothers reporting seeking treatment stayed relatively similar – around 70-80% per year.** However, in 2020, Lebanese mothers showed a sudden 17 ppt increase from previous years while Syrian mothers stayed the same compared to previous years. It is not clear in the data why there would be such a large percentage point increase for Lebanese women only in 2020 compared to the previous history of the project cycle. **The percentage of those seeking treatment after 24 hours has also held stable throughout the five-year cycle** when taking into account the increased margin of error and **Lebanese and Syrian women for most years reported percentages within the margin of error of each other.** What this suggests is that even though there has been positive change in terms of the reported incidents of ARI declining since 2016, it does not appear that mothers' behaviour regarding seeking treatment has changed over the project cycle period.

Section 2: ARI Treatment Locations and Medicines

This section further details the distribution of treatment seeking behaviour among the different health system options and the type of medical options received including antibiotics.

Indicator 33: Percent of children with fast or difficult breathing[106] in last two weeks for whom advice was sought from an appropriate health facility.

Table 89: Percentage of ARI incident seeking treatment.

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	72.9	74.6	70.7	76.7	68.3	Stable
Lebanese	93.5	76.4	79.9	82.9	76.3	Stable but increased in 2020

Table 90: Percentage distribution where treatment was sought[107]

	Year	Dispensary	Clinic	Pharmacy	Doctor	Hospital

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[104] Green = Significant

[105] Only applicable when statistically significant

[106] The survey includes together difficult breathing AND coughing in a single question.

[107] Other options were basically zero

	Year				
	2016	36.3%	3.7%	45.3%	NA	5.3%
	2017	39.3%	7.0%	38.7%	NA	7.3%
Syrian	2018	72.4%	8.6%	11.5%	4.8%	2.7%
	2019	47.3%	9.8%	37.3%	3.4%	2.3%
	2020	57.7%	9.2%	28.7%	2.4%	2.0%
	2016	17.4%	35.2%	28.3%	NA	9.6%
	2017	17.0%	31.2%	27.3%	NA	13.5%
Lebanese	2018	33.3%	39.5%	6.8%	16.0%	4.4%
	2019	25.0%	25.0%	41.4%	3.9%	4.6%
	2020	33.7%	22.8%	38.6%	2.0%	3.0%

2020 Observations: All respondents who reported seeking treatment did so in an appropriate health facility. The patterns in the responses mirrors the general health seeking behaviour options profiled in earlier sections. **Syrians are predominantly using dispensaries with Pharmacies a distant second while Lebanese are more likely to have an equal distribution** of accessing Dispensaries, Clinics, and Pharmacies. Very few respondents cited using hospitals or any other health option. In terms of the social factors, **dispensaries were the preferred choice of mothers who could not read or write, who lived inside the catchment, and who had participated in Medair activities**. The SDCs showed about 30 ppt variation between Britel (highest preference for clinics and pharmacies) to Joub Janine (highest preference for dispensaries. This pattern suggests that the logic of the dispensaries within the project is helping to reduce the strain on the existing health system by providing a medical option for women with children in ARI situations.

Multi-Year Observations: As with the earlier health seeking behaviour, the percentage of mothers using dispensaries has increased over time for both Syrian and Lebanese families. **There has been a 21.5 ppt increase for Syrians using dispensaries and a 16.3 ppt increase among Lebanese.** The primary changes in distribution have been **a decline in the use of hospitals as an ARI treatment option**. This pattern suggests that the logic of the dispensaries within the project is helping to reduce the strain on the existing health system by providing a medical option for women with children in ARI situations and that the role of the dispensaries in provide a health option has become more prominent over the project cycle years.

Indicator 34: Percent of children with fast or difficult breathing[108] by type of treatment

Table 91: Percentage of type of treatment reported for fast or difficult breathing.

	Year	Antibiotics	Cough Drops	Painkiller	Antihistamines
	2016	22.6	68.9	25.3	8.9
	2017	22.4	71.6	33.9	5.4
Syrian	2018	40.7	69.5	37.5	15.6
	2019	37.0	62.8	40.0	17.6
	2020	26.6	59.7	46.4	16.7
	2016	34.2	61.6	38.4	29.2
	2017	29.6	77.2	32.8	9.0
Lebanese	2018	41.5	70.6	39.4	23.0
	2019	33.6	63.8	46.1	18.4
	2020	37.6	72.3	47.5	20.8

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[108] The survey includes together difficult breathing AND coughing in a single question.

Table 92: Percentage of type of treatment reported for severe ARI cases[109]

	Year	Antibiotics	Cough Drops	Painkiller	Antihistamines
Syrian	2016	44.2	42.7	37.5	58.8
	2017	44.3	36.2	43.4	52.9
	2018	41.6	39.5	42.0	66.3
	2019	42.0	36.4	35.4	58.4
	2020	19.2	15.4	16.2	14.3
Lebanese	2016	69.3	45.9	59.5	65.6
	2017	45.7	33.3	49.0	46.4
	2018	44.4	31.2	38.7	44.6
	2019	29.4	32.0	31.4	42.9
	2020	18.4	13.7	16.7	28.6

2020 Observations: Antibiotics are considered as essential treatment for ARI and the others are considered redundant. The indicator in the project logframe is written as "fast or difficult breathing seeking treatment" and the first table reports those percentages of those who had both cough and difficulty breathing. The second table report those percentages of treatments for those who had severe ARI (cough AND difficulty breathing). For the first table, **Cough drops were the most frequently reported medicine** received for both Syrians (59.7%) and Lebanese (72.3%) with painkillers the second most cited medicine (46.4% and 47.5% respectively). The only significant difference among the medicine distributions in 2020 related to antibiotic usage where Lebanese mothers were 11 ppt more likely to report antibiotic medicines compared to Syrians. **Lebanese mothers were more likely to cite multiple medicines administered compared to Syrian**s with Lebanese families reporting an average of 1.8 medicines given per child compared to 1.5 per child for Syrians.

For the second table, antibiotics were the most frequently prescribed treatment in 2020 although the values were similar. The only significant difference among the medicine distributions in 2020 related to antihistamines usage where Lebanese mothers were 14 ppt more likely to report antihistamines medicines compared to Syrians.

Multi-Year Observations: Over the project cycle, **there has been a gradual increase in the percentages of all medicines being cited with painkiller usage the biggest increase from the 2016 data**. Antibiotic usage has fluctuated across the years with sharp increases in 2018 for both Syrian and Lebanese women but the 2020 levels are comparable to the 2016 levels for both populations. Cough drop reporting has declined among Syrian women (-9.2 ppt) but increased among Lebanese (10.7 ppt). Painkiller usage has seen the biggest increases over time with a 21.1 ppt increase for Syrians and a 9.1 ppt increase for Lebanese. Antihistamines have increased 7.3 ppt for Syrians and declined about 9 ppt for Lebanese. However, for the latter, the fluctuations have been volatile across the project cycle years.

Given the evidence, the biggest point of concern in terms of medicine usage would be the relatively large increase in painkillers. **However, there may be technical issues regarding the reliability of this data** because mothers may not always be aware of the differences between the different types of medicines – especially between antibiotics, painkillers, and antihistamines. As such, they may unintentionally mis-report the usage of these medicines. A more accurate measure regarding medicine usage may be to rely on dispensary records for prescriptions rather than self-report from mothers who may not be as familiar with the medical terminology.

Over the project cycle, **there has been a relatively stable percentage reporting receiving medicines for severe ARI cases (coughing AND difficulty breathing). For all medications, there was a substantive drop in all treatments in 2020**. The steep decline in 2020 may be related to the COVID-19 restrictions and the limitations for seeking treatment.

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[109] For coughing AND difficulty breathing

Section 3: Prevalence and Treatment of Diarrhoea

This final section tracks the prevalence and treatment of Diarrhoea. Especially the use of Oral Rehydration Solution (ORS). Given timing, the prevalence of diarrhoea is discussed first followed by treatment strategies even though the project logframe has these indicators reversed. It is important to note that when discussing the percentage of children by treatment, this is the SHARE of children receiving a certain treatment from only those who had a diarrhoea incident.

Indicator 35: Percent of children that experienced diarrhoea in the last two weeks

Table 93: Percentage of diarrhoea incident last two weeks

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	22.1	26.5	25.1	34.1	41.4	Decreasing
Lebanese	11.0	21.6	16.8	24.5	35.5	Decreasing

Table 94: 2020 Demographic comparisons for diarrhoea prevalence

Demographic	Significance (Y/N)[110]	Percentage Point Difference[111]	Comment
Nationality		11.1	
SDC		8	Not relevant but Kabelias reported highest rate
Catchment		8.1	Those outside the catchment had lower rate
Literacy			
Marriage			
Participation		6.1	Not relevant as participation is not likely to lead to diarrhoea

2020 Observations: **Syrian mothers reported higher rates of incidence (22.1%) compared to Lebanese mothers (11.0%).** There is a mild link to vulnerability, but not strong. Mothers who could not read or write and who were married young had slightly higher percentages of diarrhoea incidence, but within the margin of error. Those living outside the catchment area were somewhat less likely to report diarrhoea and among the SDCs, Kabelias had the highest reported percentage (23%). The participation in Medair activities is likely a spurious relationship because it is unlikely that participation would lead to increased diarrhoea. What is more likely is that recruitment for participation in activities is intentionally targeting households which would be more at risk for illnesses such as diarrhoea.

Multi-Year Observations: As with ARI, it appears that there has been some improvement in the overall hygiene environment as there has been a steady decline among both Syrians and Lebanese mothers on the incident rates since 2016. **The decline has been sharper for Lebanese (24.5 ppt) than for Syrians (19.3), but both are trending positively**. This could be a reflection on changes in household behaviour regarding hygiene practices but could also be the result of improvements in water supply quality or other systemic changes.

Indicator 36: Percent of children receiving ORS and zinc supplementation.

Table 95: Percentage distribution where treatment was sought[112]

	Year	Dispensary	Clinic	Pharmacy	Hospital
Syrian	2016	27.3	4.3	36.7	7.2
	2017	39.6	10.2	34.5	6.1
	2018	55.8	3.4	34.0	3.8

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[110] Green = Significant
[111] Only applicable when statistically significant
[112] Other options were basically zero

	Year				
	2019	47.3	9.2	34.4	3.9
	2020	55.7	5.7	33.6	4.8
Lebanese	2016	19.5	27.3	24.2	11.7
	2017	22.2	28.5	22.2	15.8
	2018	32.1	17.4	32.1	9.2
	2019	20.5	17.3	39.4	7.1
	2020	36.0	22.1	40.7	2.3

Table 96: Percentage of type of treatment reported.

	Year	Antibiotics	ORS	Zinc	IV[113]	Home	Herbal
Syrian	2016	NA	30.1	6.8	1.4	4.8	11.0
	2017	NA	38.7	27.8	3.8	4.7	5.2
	2018	74.7	38.1	8.7	6.0	6.8	2.3
	2019	64.4	50.9	9.0	4.5	6.5	1.8
	2020	64.2	49.1	17.3	3.3	3.9	1.2
Lebanese	2016	NA	17.6	9.2	1.5	9.9	9.9
	2017	NA	34.4	28.8	5.5	3.7	4.9
	2018	71.4	43.1	11.1	3.7	10.1	2.8
	2019	62.9	49.6	12.6	5.5	10.2	2.4
	2020	62.5	58.1	9.3	1.2	2.3	2.3

2020 Observations: 86% of the mothers reported seeking treatment. As with the other health seeking options, **Syrians were more likely to use dispensaries or pharmacies for treatment (55.7% and 33.6% respectively) while for Lebanese the options were more equally distributed among clinics, pharmacies, and dispensaries**. Other options were not significant. Among the social factors, Marj SDC respondents were least likely to use dispensaries (35.6%) and Kabelias respondents were least likely to use pharmacies (26.7%). Those living outside the catchment areas were less likely to use dispensaries (-31.6 ppt) and more likely to use pharmacies (23.6 ppt). **Women who could not read or write were also more likely to use dispensaries (15.8 ppt) and less likely to use clinics (-6 ppt).** No other social factor influenced where treatment was sought.

In terms of treatment type, **the percentage of mothers reporting receiving antibiotics is high** – over 60% for both nationalities. About half of the respondents in both nationalities reported receiving ORS (49.1% and 58.1% respectively) and between 10-20% reported receiving zinc supplementation (17.3% and 9.3% respectively). Nationality made a difference in terms of receiving ORS where **Lebanese mothers were more likely to receive ORS than Syrians (10 ppt), but Syrians were more likely to receive zinc (8 ppt).** No other social factor influenced the overall distribution of treatments received.

Multi-Year Observations: In terms of medication, antibiotic usage has stayed high but stable during the years it was tracked. **ORS has increased substantively for Lebanese women (41.5 ppt) but also for Syrians (19 ppt) since 2016.** Reports on zinc supplementation have fluctuated widely across the project cycle years by more than 20 ppt in both groups. If the extreme years (2017) are removed from the sample, then the remaining years are more **stable for zinc supplementation with about 10% of both Syrians and Lebanese reporting using zinc.** Syrian women did report receiving zinc supplementation slightly more frequently in 2020 compared to the previous year.

As with the other health seeking, the dispensaries have played an increasingly important role in the treatment of diarrhoea for both Syrians and Lebanese. **Among Syrians, there has been a 28.5 ppt increase since 2016 in the use of dispensaries for diarrhoea treatment and 17.5 ppt increase among Lebanese**. This is balanced by Syrians using hospitals and clinics less and Lebanese using hospitals

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[113] Intravenous fluid

less. This is positive in the logic of providing another support to the health system and reduce the strain on the formal structures.

4.2.11 Non-Communicable Diseases (NCD)

This section highlights the percentage of families with at least on household member with diabetes or hypertension and the percentages that know of ways to reduce the risk from NCDs.

Indicator 37: Percent of mothers reporting at least one HH member with NCD.

Table 97: Percentage of households with diabetes

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	5.7	8.7	7.9	10.4	9.5	Stable
Lebanese	7.1	11.7	12.0	11.6	10.4	Stable

Table 98: Percentage of households with hypertension

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	11.3	15.7	15.0	19.1	20.2	Decreasing
Lebanese	9.3	14.0	15.3	14.8	16.1	Decreasing

Table 99: Percentage of households with an NCD

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	13.8	18.8	18.1	21.6	23.4	Decreasing
Lebanese	13.1	18.6	21.3	19.1	21.2	Decreasing

2020 Observations: Overall percentages of NCD households is low with more cases of hypertension than diabetes. Syrian households reported 5.7% with 11.3% hypertension while Lebanese households reported more similar percentages (7.1% diabetes and 9.3% hypertension). **The total percentage of households reporting an NCD is similar for both nationalities (13.8% and 13.1%).** No social factor influenced the distribution of NCD households.

Multi-Year observations: **There has been a substantive decline in households reporting an NCD since 2016 (9.6 ppt for Syrians and 8.1 ppt for Lebanese).** The biggest decline has been among households reporting hypertension. Diabetes rates show a slight decline but within the margin of error. **Hypertension rates show a statistically significant change**. Hypertension is more influenced by lifestyle in a short period of time compared to diabetes. Therefore, these patterns suggest that there have been improvements in diet or other lifestyle behaviour among both Syrian and Lebanese within the population. Given that the declines are so similar between the two groups and no social factors were influencing the distributions, it is likely that this is reflective of a change in the strengthening the overall health system or environmental messaging rather than specific project activities targeting specific populations.

Indicator 38: Percent of mothers who know two or more ways to reduce NCDs.

Table 100: Percentage of households who can cite two NCDs.

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	35.4	30.1	26.4	NA	NA	Increasing
Lebanese	65.4	53.6	57.6	NA	NA	Increasing

Table 101: 2020 Demographic comparisons for NCD risk knowledge

Demographic	Significance (Y/N)[114]	Percentage Point Difference[115]	Comment
Nationality		30	

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[114] Green = Significant
[115] Only applicable when statistically significant

SDC		17.7	Kabelias lowest and Britel highest	
Catchment				
Literacy		16.4		
Marriage		15.5		
Participation		8.5	Participation was less likely to report two or more risks	

2020 Observations: The number of households who can cite two or more ways to reduce NCD risks is substantively different between Syrian and Lebanese households. **About 35.4% of Syrian households could cite an NCD risk while 65.4% of Lebanese households could cite ways to reduce risks**. Besides nationality, women who were not able to read and write and who were married young were less likely to be able to cite ways to reduce NCD risks. SDCs had different distributions with Kabelias the lowest percentage of households (37%) and Britel the highest (55%). Somewhat unusually, participation in Medair activities is correlated with respondents being LESS likely to report at least two ways to reduce NCD risks. It is not clear why there would be a negative association, but likely related to the activities specifically targeting more vulnerable households less likely to know NCD risks.

Multi-Year Observations: There has been an increase among both nationalities in terms of being able to cite ways to reduce risks. **The gain has been around 9 ppt for Syrian households and 8 ppt for Lebanese households.** Lebanese households consistently are more able to cite two ways to reduce NCD risks then Syrians and the difference is substantive – usually 20-30 ppt in any given year.

4.2.12 Psycho-Social Support (PSS)

This section assesses the degree to which respondents can access and are satisfied with psycho-social support services (PSS). The PSS services profiled include: Support groups, counselling, medicine, and social workers. The indicators in question are similar to the way that the RH services section was operationalized. Six indicators are contained in this dimension: Whether respondents are aware of what types of PSS services are available and where they can access them. Whether respondents would feel comfortable and able to access these services. Whether respondents have had a discussion on PSS with a trained service provider and finally, whether respondents did access these services in the last six months and how satisfied they were with the services provided.

Indicator 39: Percent of respondents who correctly identify available PSS services.

Table 102: Respondents can cite at least one PSS service available.

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	32.3	35.6	20.7	20.0	18.0	Increasing
Lebanese	33.4	29.4	22.6	25.3	30.1	Stable

Table 103: Percent of Respondents who can cite each PSS service.

Nationality	Year	Support Groups	Counselling	Medicine	Social Workers
Syrian	2016	12.3	1.6	4.1	
	2017	13.6	4.3	3.6	
	2018	15.9	5.0	2.1	
	2019	20.2	5.1	2.2	4.5
	2020	26.1	7.9	0.4	8.5
Lebanese	2016	1.4	5.4	15.3	
	2017	10.2	6.5	10.7	
	2018	9.7	6.5	10.9	
	2019	13.5	11.5	7.7	5.3
	2020	21.6	10.6	2.6	6.0

Table 104: 2020 Demographic comparisons against a PSS service[116]

Demographic	Significance (Y/N)[117]	Percentage Point Difference[118]	Comment
Nationality			
SDC		22.0	Lowest Marj, highest Janine Joub
Catchment		6.6	Outside catchment area less likely
Literacy			
Marriage			
Participation		22.2	Substantive difference if participated in Medair activities

2020 Observations: About one third of the respondents could cite at least one PSS service available. **For Syrians, the most commonly cited was support groups (26.1%) followed by counselling (7.9%). Lebanese women had similar patterns (21.6% and 10.6% respectively**). Very few respondents cited medicine or social workers. This suggests that there is limited knowledge among the population regarding PSS options and the only service that is even somewhat broadly recognized are the support groups. **The PSS services available appear to be closely associated to the SDCs as a service provided at the SDCs** because those living outside the catchment were less likely to cite any PSS service while there was no difference between the nationalities. **Participation in Medair activities had an enormous effect on knowing of PSS services (22 ppt).** While the SDCs may be a source of PSS promotion, there were significant variations among the SDCs with Marj reporting the lowest percentage know of PSS services (20%) and Joub Janine the highest (42.3%).

Multi-Year Observations: Knowledge of PSS services has increased since 2016 by a substantive margin, even if overall they are not well known yet. **The biggest gains are among the Syrian populations. The Syrians reported an 14.3 ppt increase since 2016 while Lebanese had a 3.3 ppt increase in the same timeframe.** By far the biggest increase is related to the spread of support groups (20+ ppt for both groups). Syrians tended not to cite medicine as an option at all throughout the project years while there has been a decline in the percentage of Lebanese (which started small even so) in citing medicine as an option. It appears that PSS services are assumed to be either support groups or receiving individual psychological counselling. Project activities appear to have emphasized support groups over other options in the current cycle.

Indicator 40: Percent of respondents who correctly identify where to access PSS services.

Table 105: Respondents can cite at least any PSS source[119]

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	44.1	37.7	26.0	15.9	19.1	Increasing
Lebanese	43.2	40.0	36.2	27.0	38.9	Stable

Table 106: Respondents can cite at least one PSS trained service location [120]

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	18.1	16.5	17.3	8.2	12.8	Increasing
Lebanese	25.2	21.4	24.0	18.8	26.4	Stable

Table 107: Percent of Respondents who can cite each PSS trained service location.

Nationality	Year	Dispensary	Clinic	NGO	Hospital
Syrian	2016	7.9			5.2

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[116] Due to space and readability considerations, the percentage point differences are not cited here but can be found in the SPSS tables accompanying this report.

[117] Green = Significant

[118] Only applicable when statistically significant

[119] From question "if you are someone you cared about needed PSS services, where would you go?"

[120] From question "if you are someone you cared about needed PSS services, where would you go?"

	2017	5.8			2.4
	2018	12.8	1.6	3.6	0.3
	2019	7.1	5.4	5.3	0.1
	2020	13.4	2.2	2.8	0.5
Lebanese	2016	5.2			21.8
	2017	5.6			13.3
	2018	7.2	14.2	2.3	2.8
	2019	2.5	16.5	3.6	2.1
	2020	6.5	17.2	4.2	0.4

Table 108: 2020 Demographic comparisons against a PSS location[121]

Demographic	Significance (Y/N)[122]	Percentage Point Difference[123]	Comment
Nationality	(green)	7.1	
SDC	(green)	12.1	Marj lowest and Britel highest
Catchment			
Literacy			
Marriage			
Participation	(green)	5.0	Participation less likely to lead to knowledge of PSS locations

2020 Observations: Just over 40% of respondents (44.1% and 43.2% respectively) were able to cite some source for PSS support. However, the majority of these sources were informal options such as friends, family, religious figures and so forth. When only looking at the percentage of respondents who cited a specialized service such as an NGO, mental health clinic, or SDC, the numbers were much lower. **Only 18.1% of Syrians and 25.2% of Lebanese cited a specialized PSS source.** Among the social factors, besides nationality, no vulnerability factor made a difference. There were variations among SDCs with the Marj SDC reporting the lowest percentages and Britel the highest.

Oddly, participation in Medair activities was inversely related to citing a specialized PSS location. While the previous indicator noted that participation in Medair activities was influential in being able to cite the existence of a PSS service, the same factor reduced the likelihood of knowing where such a resource could be accessed. **This is a contradictory pattern and may be that the source question is unreliable**. The exact phrasing is "if you or someone you knew needs psychological support, where can you go for this type of service?" - the question as phrased may be leading respondents to think about "to whom would they go to talk about psychological issues?" – which in turn would be more likely to lead them to think about informal conversations or talking to religious figures for solace. It might be helpful in future surveys to more specifically ask where the sources of specialized PSS support are to better track how well these sources are known.

Multi-Year Observations: Across the project cycle, **there has been an increase in the percentage of respondents who can cite PSS support, but most of this increase is driven by respondents identifying informal sources** of support such as friends or religious figures. **The change over time is more related to substantive increases in Syrian**s while Lebanese responses have stayed more stable. For Syrians, while the percentage of respondents citing all types of support has increased 25 ppt of which 6 ppt were related to citing formalized services. Among Lebanese, there has been a 5 ppt increase from 2016 in all sources, while specialized source citations have remained stable.

In 2016, there was a big difference between Syrians and Lebanese regarding PSS sources, but by 2020, this gap had closed and there were no differences among the nationalities on overall sources. Lebanese

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[121] Due to space and readability considerations, the percentage point differences are not cited here but can be found in the SPSS tables accompanying this report.

[122] Green = Significant

[123] Only applicable when statistically significant

are still slightly more likely to cite a specialized source (25% versus 18%). **What these patterns suggest is that there has become an increasing recognition among Syrians on the importance of getting support for trauma and depression but there is still limited knowledge regarding where to access this type of support.** Lebanese populations have not changed as much over time which suggests that the driver of the change may be awareness raising campaigns among the refugee populations. In future programming, it may be helpful to place more emphasis on raising awareness among both populations regarding what is meant by PSS support AND where it can be accessed.

Indicator 41: Percent of respondents who discussed PSS with a trained provider.

Table 109: Respondents discussed PSS any source.

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	26.1	22.0	17.2	NA	NA	Increasing
Lebanese	24.1	12.7	17.0	NA	NA	Increasing

Table 110: Respondents discussed PSS with trained service provider.

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	16.0	17.1	10.9	NA	NA	Slight increase
Lebanese	12.6	6.1	9.6	NA	NA	Volatile stable

Table 111: Percent of Respondents who discussed PSS with following sources.

Nationality	Year	Dispensary	Clinic	NGO
Syrian	2016			
	2017			
	2018	5.0	0.8	5.3
	2019	2.8	0.9	13.7
	2020	6.6	0.5	9.2
Lebanese	2016			
	2017			
	2018	3.6	4.1	1.3
	2019	1.1	2.1	3.0
	2020	4.9	3.3	5.1

Table 112: 2020 Demographic comparisons against a PSS discussion trained source[124]

Demographic	Significance (Y/N)[125]	Percentage Point Difference[126]	Comment
Nationality			
SDC		19	Marj lowest percentage and Joub Janine highest
Catchment		6.1	Outside the catchment area less likely
Literacy			
Marriage			
Participation		18.4	Participation much more likely to have discussed with trained source

2020 Observations: When asked if they had had discussed PSS advice with someone, about one quarter of the respondents in 2020 said they had. About 10% of these respondents were referring to conversations on PSS with informal sources. When only tracking discussions with a trained service provider, **16.0% of Syrians and 12.6% of Lebanese mothers reported having a PSS discussion with a trained service provider** in the past year. For both populations, the most common trained service

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[124] Due to space and readability considerations, the percentage point differences are not cited here but can be found in the SPSS tables accompanying this report.
[125] Green = Significant
[126] Only applicable when statistically significant

provider was a specialized NGO (9.2% and 5.1% respectively), followed closely by dispensaries (6.6% and 4.9%). A small percentage of Lebanese also mentioned health clinics (3.3%) but not Syrians. Among the social factors, the percentage distribution among SDCs was variable with Marj having the lowest percentage and Joub Janine the highest. Living outside the catchment area slightly reduced having a PSS discussing which probably illustrates the role that SDCs provide in providing PSS services. **Participation in Medair activities had a substantive influence** with a difference of 18.4 ppt between those who had participated and those who had not. This suggests that Medair activities do increase the awareness and opportunity for having PSS discussions.

Multi-Year Observations: Because the percentages of respondents having PSS discussions is so low, the year-to-year values fluctuate considerably, and the margin of error is large. **There is a slight increase in having PSS discussions from 2016 (7.9 ppt for Syrians and 7.1 ppt for Lebanese).** Discussions with trained service providers has not increased quite as commensurately.   The relative percentages between the two nationalities have stayed within the margin of error although fluctuating year to year. Among the trained service provider sources, **the only source to grow consistently in the past three years has been the percentage citing a specialized NGO** for services. This increased about 4 ppt for both populations. The overall evidence suggests that even as knowledge of the existence of PSS services is still low among the respective populations, actually accessing these services is even less common. The positive effects of participation in Medair activities suggest that more emphasis on this in future programming activities would add value.

Indicator 42: Percent of women who report that they would be comfortable and able to access PSS services.

Table 113: Respondents comfortable to access PSS.

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	67.3	77.3	48.3	48.6	79.3	Volatile but increasing from 2018
Lebanese	74.5	77.2	52.2	57.4	83.2	Volatile but increasing from 2018

Table 114: Respondents able to access PSS.

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	53.1	49.4	36.9	40.7	53.1	Volatile but increasing from 2018
Lebanese	68.8	57.7	45.3	55.6	61.9	Volatile but increasing from 2018

Table 115: 2020 Demographic comparisons against comfort and ability to access.

Demographic	Comfort Significance (Y/N)[127]	Percentage Point Difference[128]	Comment
Nationality		7.2	
SDC		20.0	Talia lowest and Joub Janine highest
Catchment			
Literacy			
Marriage			
Participation		11.2	Participation more likely to be comfortable
Demographic	**Ability to Access. Significance (Y/N)[129]**	**Percentage Point Difference[130]**	**Comment**
Nationality		15.7	
SDC		22.2	Marj lowest and Joub Janine highest
Catchment			
Literacy			
Marriage			

[127] Green = Significant
[128] Only applicable when statistically significant
[129] Green = Significant
[130] Only applicable when statistically significant

Participation		12.0	Participation more likely to be able to access

2020 Observations: The percentages of respondents who said that they would be comfortable and able to access PSS services is unusually high. **Among Syrians, 67.3% said they would be comfortable and 53.1% said they would be able to access PSS services**. For Lebanese, 74.5% said they would be comfortable and 68.8% said that they would be able to access PSS services. **There is some potential issue around reliability of these questions because of the unusual patterns in the responses**. Even though only about 20% of the respondents could cite a location for accessing a trained service location (Indicator 39), nevertheless, more than double that percentage (58%) said that they would be able to access a PSS service. It is odd that they might be able to access a service that they do not know where to access. Even if the filter is expanded to allow for ANY PSS source, including informal sources like friends and family, there is still around a 14 ppt difference between those who can cite a source (44%) and those who said they would be able to access (58%).

One possibility is that respondents are responding to this question through the lens of asking if they feel that they have any restrictions on their movements to potentially be able to access a service. If this is the case, then it is **of concern that about half of the respondents are reporting some restrictions to accessing PSS services either through** socially or culturally. It may be worthwhile to include future programming that addresses potential restrictions to movements.

Among the social factors, there are significant differences among nationality, SDC, and participation in Medair activities. **Lebanese are about 15 ppt more likely to be comfortable and able to access PSS services than Syrians**. There is a more than 20 ppt difference among the SDCs with Marj the lowest percentage of respondents and Joub Janine the highest. Participation in Medair activities is interesting because of the potential for future programming. **Respondents in Medair activities were about 11-12 ppt more likely to feel comfortable and able to access PSS services** compared to non-participants. This suggests that there is potential for future programming in PSS to increase participants comfort and awareness of the services.

Multi-Year Observations: When looking over the entire five-year project cycle, the response patterns for comfort and access are volatile with an unusually high starting value in 2016 followed by substantive drops in 2017 and 2018. **If one takes 2018 as a starting point, there has been an increase in respondents comfort and ability to access PSS.** Since 2018, Syrian percentages for comfort have increased 19.6 ppt while for Lebanese they have increased by 22.3 ppt. For ability to access, Syrians have increased by 16.2 ppt and Lebanese by 23.5 ppt. This is positive as it suggests that there is a growing familiarity with PSS as an option even though overall values are still low.

Indicator 43: Percent of women who report accessing PSS services in past six months.

Table 116: Respondents who report PSS need (sad, stressed, pressure)

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	72.3	75.7	75.2	60.6	80.9	Decreasing slightly
Lebanese	75.7	69.5	70.7	51.7	78.5	Volatile and stable

Table 117: Respondents who accessed PSS all sources.

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	50.1	42.7	42.4	41.0	43.1	Increasing slightly
Lebanese	53.7	42.7	48.9	47.5	48.5	Stable

Table 118: Respondents who access PSS from specialized services.

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	2.1	3.1	3.0	2.8	3.7	Stable
Lebanese	5.0	2.5	6.0	9.3	8.9	Stable slight decrease

Table 119: Percent of Respondents who accessed PSS from following sources.

Nationality	Year	Dispensary	Specialized Clinic	NGO	Clinic	CHV[131]	Family or Friend	Mosque or church
Syrian	2016	1.0	1.0	0.0	1.0	1.0	39.4	0.7
	2017	1.2	1.2	0.4	0.4	0.4	36.5	2.0
	2018	0.9	0.5	0.3	0.8	0.3	39.8	0.9
	2019	1.1	0.3	0.0	0.5	0.7	38.9	1.0
	2020	0.6	0.7	0.2	0.5	0.1	48.2	0.5
Lebanese	2016	1.0	1.7	0.3	5.9	0.3	40.9	1.3
	2017	0.6	1.6	0.0	6.5	0.3	41.9	1.9
	2018	0.8	1.0	0.4	3.8	0.2	44.0	1.7
	2019	0.0	0.2	0.2	2.1	0.0	40.2	1.5
	2020	0.7	0.6	0.1	3.3	0.0	50.3	0.6

2020 Observations: In 2020, about three quarters of the respondents reported experiencing PSS effects (72.3% for Syrians and 75.7% for Lebanese). However, the percentage of respondents who accessed PSS services is very low. **About 50% did report access PSS services, however, the vast majority of these services access were discussions with family or friends, with religious figures or other forms of informal suppor**t. If PSS services are narrowed to the provision of specialized services from dispensaries, clinics or other trained service providers, the responses are very small. **Only 3.1% overall reported access PSS services from a trained provider** (2.1% for Syrians and 5.0% for Lebanese). None of the individual social factors influenced the relative distributions because the overall values were too low.

Multi-Year Observations: **Among the entire project cycle, there is a slight increase in the percentage of Syrians who report accessing PSS support from all sources – including friends or family**. This increased about 7 ppt since 2016 for Syrians. However, **for trained service providers access, the overall numbers remain stable because the values are so low**. What can be inferred from these patterns is that respondents do value the support from informal sources for addressing PSS need, but have not yet become accustomed to using specialized services for PSS support. Given the degree of need in the sample, this could be an important consideration for future programming to further expand access to and use of specialized services.

Indicator 44:   Percent of women who report accessing PSS services in past six months who are satisfied with the support.

2020 Observations: The percentage of respondents in the 2020 sample who actually accessed services from trained providers is too low and the unanimity of satisfaction with services is too high to provide useful analysis of satisfaction with services. Among the entire group of respondents who said that they accessed services, **only 69 people cited not satisfied**. **Nearly all respondents who accessed a service (96%) said that they were satisfied or highly satisfied.** Because of the wide consistency in the patterns of response, it is not possible to differentiate relative satisfaction with services provided.

Multi-Year Analysis: Very few persons accessed PSS services from trained providers over the project cycle. Among those, **no more than 5-10% in any given year were NOT satisfied and most of these were from earlier in the cycle**. The response patterns between Syrians and Lebanese were similar within the margin for error.

The high consistency suggests reliability issues with the survey question. Respondents may not be sufficiently knowledgeable regarding what ought to be the quality of support for a PSS service and therefore are not able to judge whether they had received this care or not. To assess quality of care in future programming, it may be useful to consider adding PSS questions related to specific items that

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[131] Community Health Volunteer

should have been covered in PSS support and having the mothers respond on whether these elements were present or not rather than asking for a general satisfaction rating.

4.2.13 Child Registration

This dimension is related to the importance of registration of children in order to allow for access to the national health care systems and is only asked of Syrians refugees. There are two indicators related to this question – first asking whether the children were officially registered in their own country and then whether the children had a birth certificate. The first is interpreted as whether they were born in Syria and the second focused on whether they have a birth certificate.

Indicator 45: Percent of children officially registered in their own country (for Syrians)

Table 120: Respondents who report children born in Syria and registered there.

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	5.5	9.8	15.0	16.5	31.1	Declining
Lebanese	NA	NA	NA	NA	NA	NA

2020 Observations: **5.5% of children in the sample under 5 had been born in Syria**. This is only 96 children from the entire sample.

Multi-Year Observations: There has been a substantive decline since 2016 of children being born in Syrian. **Since 2016, there had been a decline of 25.6 ppt from 31.1% in 2016** to less than 100 individual children in 2020.   This is not surprising as the protracted nature of the humanitarian crisis has led to families spending many years in Lebanon and denotes the importance of ensuring proper registration of children in Lebanon as their residency may take on semi-permanent status. The primary reasons given for giving birth in Syria reported by the mothers was that they had been living in Syria at the time. A distant second place was that they had family in Syria and had returned. No other reasons listed were more than a few persons mentioning them each year.

Indicator 46: Percent of children without birth certificate

Technical note: This is another negatively phrased indicator which can lead to misinterpretations. A decline in percentages of those without birth certificates is a positive factor.

Table 121: Respondents who report children are without birth certificate.

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	6.1	6.1	7.7	NA	NA	Stable
Lebanese	NA	NA	NA	NA	NA	NA

2020 Observations: **The percentage of children *without* birth certificates is 6.1%.** This works out to about 105 children in the entire sample. 80% of the sample reported receiving the birth certificate from the hospital and the remainder from the doctor (who was supposedly in the clinic or hospital).

The percentage of children *without* birth certificates is much **higher for those children that were born in Syria (38.5%)** than those that were born in Lebanon (4.1%). Of the 105 children without a birth certificate, **28% of these are for children under six months in age**. Although the overall percentages are high, given the inclination towards younger children not having their birth certificate and those who were born in Syria not having their birth certificate, there may be some marginal utility in future programming activities that specifically target ensuring birth certificates within the first six months of birth and specifically for those who were born in Syria.

Multi-Year Observations: **The percentage of children without a birth certificate is stable and low (between 6-8% per year).** This suggests that although there may be some gains to be made through

registration of children who were born in Syria, the issue of birth certificates is not really a systemic issue but more of a case management issue for a very small number of families.

4.2.14 Maternal Mortality Related to Pregnancy

The final dimension related to mortality is measured by a single indicator: The percent of women's sisters who died due to problems related to pregnancy (within one week after delivery).

Indicator 47: Percent of women's sisters who died due to problems related to pregnancy.

Table 122: Respondents who report sister died within one week of delivery[132]

Nationality	2020	2019	2018	2017	2016	Multi-Year Pattern
Syrian	1.1	5.9	7.8	NA	NA	Declining
Lebanese	0.9	6.7	8.1	NA	NA	Declining

2020 Observations: Values for 2020 were **about 1% of the respondents who had sisters reporting that they had died in child birth with equal reporting levels between Syrians and Lebanese mothers (1.1% vs. 0.9%).[133]** No social factors influenced the distribution of these percentages. The maternal mortality rate is apparently low as it translates to just 24 cases out of 2431 reported births from sisters. The question does not specific which year the event occurred, so respondents may be thinking about sisters who died several years ago. However, assuming that these were within this current year, although a small number**, this number of deaths translates to a maternal mortality rate of 987 per 100,000 live births**. Even if one assumes that the numbers are spread across a decade, this is still a high percentage (98.7 per 100,000 live births). By comparison, Lebanon as a nation reported a maternal mortality rate of 29 per 100,000 live births in 2017.[134] This suggests that although the raw numbers are low, there could still be more attention on maternal mortality issues in future programming especially related to improved health care environment. One additional caveat beside time scale is that the survey did not factor in double counting if one mother may have died who had multiple sisters in the survey. Because of the small number of cases involved, even a few double counted sisters could have a significant influence on the live birth ratios.

Multi-Year Observations: **There is an decline among both Lebanese and Syrian women in maternal mortality (-6.7 ppt for Syrians and -7.2 ppt for Lebanese)**. The relative percentages are within the margin of error between the two nationalities. As noted in the 2020 Observations section, while the raw number of cases each year are few, the ratios per 100,000 live births would be considered high. For example, the 2018 data is based on 53 deaths per 652 sister births. This translates to a ratio of 8,129 per 100,000 live births if the time scope is a single year or 813 per 100,000 live births if spread across a decade. Even the latter, would be among the highest maternal mortality rates in the world. There have been improvements over time, but more could be considered for strengthening support to maternal mortality rates.

5 Conclusions

5.1 Overview

Thematic Structure: The health project logframe measures 47 indicators across 16 dimensions. The dimensions and indicators are measuring a mix measuring system changes and behaviour changes. For the first, the indicators are assessing whether there has been changes to the overall health system for the good provision of services related to MCH. These system level changes look at the availability of

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[132] Percentage is from those who had sisters

[133] The cause of death was asked only if it had something to do with the birthing, but this type of question is highly unreliable as respondents may not know enough medical terminology to be able to differentiate.

[134] https://en.wikipedia.org/wiki/List_of_countries_by_maternal_mortality_ratio

services, where they might be accessed, and how broad their coverage. The second types of indicators are measuring household behaviour such as breastfeeding or treatment of sick child.

The interplay between system changes and individual behaviour change is complex and overlapping. Providing increased access to services can lead to mothers behaviour changing by seeking out the services. However, the two types of indicators do shape the direction of recommendations. The first type of indicators measuring system changes provide implications for future programming in terms of Medair's support to the SDCs and strengthening the health care system. The second type of indicators provide implications for future programming in terms of Medair activities with mothers for training or awareness raising on social and behaviour change communication (SBCC).

The previous finding section profiles the individual indicators and dimensions. For building conclusions and recommendations, these dimensions and indicator can be aggregated into six general themes. These themes will be the organizing framework for discussion of the conclusions and recommendations. This section concludes with observations related to demographic social factors and the overall trend of the indicators across the entire project with subsequent implications for future programming.

Table 123: Thematic Categories

General Theme	Includes
Health Seeking behaviour	Includes availability of services and locations for services as well as whether services are sought
Mother Child Health (MCH) Management	Primarily behaviour of mothers through measuring incidence and treatment of ARI and Diarrhoea • Also includes NCD knowledge and incidence
Reproductive Health (RH) Services	Primarily system measurement regarding availability of services, locations where services can be accessed, but also includes degree to which these are accessed – focuses on ANC, PNC, FP, and STI • Includes mother's Family Planning behaviour
Birth Management	This would include the range of behaviour around the birth of a child and covers multiple dimensions: • ANC • Delivery • Maternal Mortality • Documentation of child - Birth Certificate and Registration • PNC • Breastfeeding
Vaccinations	Reviews coverage of vaccinations and management of child vaccination status by mothers
Psycho-Social Support (PSS)	Includes availability of PSS services, their locations and also mother behaviour in accessing these PSS services

5.2 Conclusions by Thematic Category

5.2.1 Health Seeking Behaviour

The incidence of need for health treatment has stayed consistent throughout the entire five-year cycle and there is no difference among Syrian refugees and vulnerable Lebanese regarding needs over time. The vast majority of respondents (90+%) report that they do seek out treatment at least some of the time. What has changed over time – in a positive direction – is the percentage of respondents that are reporting seeking out services all the time they needed health treatment. This increased by more than 12-15 ppt since the start of the project cycle for both Syrian and Lebanese mothers. In addition, the reasons given for not accessing the SDCs do not have to do with quality. The Medair supported SDCs have played an increasingly more prominent role in providing a health treatment option. **The logic of the establishment of the SDCs has been to reduce the strain on the overall health system architecture and this appears to be valid in logic and successful**.

A substantively higher percentage of women reported using Medair SDCs since the start of the cycle – nearly 30 ppt. This increase was reported in both Syrians and Lebanese although the SDCs still serve

more as the primary resource for Syrians. In particular, SDCs serve as an important resource for more vulnerable populations. **Women who cannot read or write, were married early, and who are refugees are more likely to be using the SDCs as an option and the Medair SDCs in particular**. There are fluctuations among the individual SDCs regarding their access which *may* be an indication that individual SDCs may have different levels of quality.

Those living outside the catchment areas were less likely to use SDCs, but they were accessing their medical care at the same rates as those inside the catchment which reflects that the SDCs are simply one component within the broader options for health care. Those who participated in Medair activities were more likely to seek treatment at SDCs which suggests that **Medair activities are supporting the connection to SDC usage.**

5.2.2   MCH Management

Following on from health seeking behaviour in general, there have been gains in terms of MCH management including for treatment of children with ARI and Diarrhoea as well as for household level incidence of diabetes and hypertension. **There has been a decline in the incidence of all four of these diseases (ARI, Diarrhoea, Diabetes, and Hypertension) since the start of the project cycle**.

ARI and Diarrhoea: ARI incidents have substantively reduced since 2016 by more than 30 ppt and even diarrhoea by more than 20 ppt in the same timeframe. For the first two diseases, **this may reflect general improvements in the community hygiene infrastructure such as improved access to Water, Sanitation and Hygiene (WASH)**. Rates for WASH related diseases are higher among Syrian refugees than vulnerable Lebanese suggesting that infrastructure quality is still lower in the ITS than in the surrounding communities.

While there has been a decline in the incidence of these diseases, **there does not appear to have been any changes in terms of the mothers' behaviour in seeking treatment over the project cycle**. The percentage seeking treatment has always been high, so it is not surprising that there would be relatively little movement on behaviour change. **What has changed over the project cycle is WHERE treatment is sough**t.

Dispensaries (SDCs) are playing a much more prominent role as a resource for women to seek treatment for ARI and for diarrhoea. There has been an approximately 20 ppt increase in seeking treatment at dispensaries since the start of the project cycle. More so for Syrian mothers, but both groups are using SDCs more. Syrian refugees seek treatment a majority of the time at dispensaries with a distant second to pharmacies while Lebanese mothers will tend to access dispensaries, clinics, or pharmacies more equally. The increase in dispensary usage is associated with a decline in hospital or doctor usage which again, reaffirms the logic that the dispensaries are fulfilling their role in helping reduce strain on the health system facilities.

The type of medicine administered to sick children has also changed. **For diarrhoea, there has been an increase in children receiving ORS of more than 30 ppt overall**. The gains are actually highest among Lebanese children (40 ppt) but substantive for both. Zinc supplementation is less likely to be part of the treatment and more volatile from year to year. For ARI medication, antibiotics have stayed relatively stable across the project cycle (reported one third of the time). There has been an increase in the administration of both pain killers and antihistamines for ARI as treatment options. The percentage receiving painkillers has particularly increased to about half of the cases for both Lebanese and Syrian children. There is a possibility mothers may be confusing the types of medicines they are receiving, so these patterns should be tracked from the SDCs as well for triangulation.

NCD: **NCD changes are milder, but still positive**. Diabetes rates have not changed much over the project timeframe but reported incidents of hypertension have declined (about 7 ppt since 2016). The rates of NCD diseases are similar between the two nationalities. While there are genetic components to these two NCDs, these can be mitigated by lifestyle and the **reported declines in the relative rates could reflect lifestyle changes among both the Syrian refugees and Lebanese**.

However, **SBCC activities may not be leading to this lifestyle change**. SBCC activities emphasize raising awareness about actions to take to reduce NCD. However, the declines are similar between the two groups and are not affected by other social factors. Furthermore, **while the declines are similar, the level of knowledge regarding ways to reduce NCD incidence is very different**. Lebanese mothers are nearly twice as likely to be able to cite ways to reduce NCDs than Syrian refugee mothers. This suggests that SBCC activities may be less influential and it may be that **the declines are linked to strengthening the overall health system or environment rather than as a result of specific project activities for SBCC**.

5.2.3   RH Services and Family Planning

General RH Services: There are four RH services– ANC, PNC, FP, and STI – but **ANC and PNC predominate in mothers' minds**. In 2020, the vast majority of both Syrian and Lebanese mothers could cite ANC (90%) and PNC services (80%). However, less than a third could cite FP and less than 20% could cite STI services. More positively, **knowledge of RH services and their locations has increased for both Syrian refugees and Lebanese mothers during the project period** with a much greater degree of increase among Syrian mothers. The Syrian mothers have essentially caught up to Lebanese in terms of RH services and locations.

There are differences in terms of the locations of services cited. For both populations, **dispensaries have assumed an increasingly prominent role in people's minds for RH services within a nearly 60 ppt increase for Syrian mothers and about half of that for Lebanese mother**s. Lebanese mothers were more likely to cite clinics as an RH location while Syrian mothers would cite dispensaries. As with general health treatment, **dispensaries are particularly important for more vulnerable populations** including women who cannot read or write or who were married young. Participation in Medair activities is also linked to increased knowledge of RH services and their locations – especially for relying on dispensaries as their resource. This is a **positive reflection on the role of Medair work in supporting the strengthening of the SDCs for RH services**. One item for future work is that most respondents can only cite one place to go for RH services. It may be important to consider increasing awareness of diverse options for RH services.

A high percentage of respondents said that they would be comfortable and able to access RH services. However, it is quite likely that **they are only thinking of ANC and PNC options because FP and STI are so little referenced** in the survey responses. Comfort and access responses might be different if women were specifically asked about FP and STI access and it suggests more work could be done on strengthening FP and STI knowledge.

Relatively few mothers actually reported accessing any RH services. The most frequently cited RH services accessed were ANC (high 30%) and PNC (low 30%). FP and STI services were accessed by less than 10% of the mothers for FP and less than 2% for STI. **There has been an increase in mothers accessing ANC and PNC services** since the beginning of the project cycle. Especially for Syrian mothers accessing PNC services. There has been **no real change in mothers reporting that they accessed FP or STI**. It may be important to consider strengthening the FP and STI components in future programming. **Participation in Medair activities did result in participants being more likely to seek out ANC and PNC services** although did not change FP or STI rates.

When they do access services, **respondents report a very high degree of satisfaction across all types of services and all places to access them**. The high rates of satisfaction are likely connected to that fact that mothers may not actually know what constitutes quality care and it might be helpful to redesign the survey questions to ask about specific characteristics that occurred in a service rather than a general satisfaction question.

Accessing FP services. About 30% of mothers reported discussing FP issues with someone. This has increased since the beginning of the project cycle by about 5-6 ppt. However, **most of the time, mothers are discussing FP informally with friends, family, or others.** Very few mothers discuss FP with

trained service providers (about 10%). This has remained relatively constant throughout the project cycle.

Few mothers with children under two (about 45%) reported using any type of delayed pregnancy methods and only half of these were modern methods. The percentage of mothers reported using an FP method has stayed stable across the entire cycle, suggesting little behaviour change has occurred.

An assumption behind the project logic is that SBCC communication on risks to early pregnancy or what is proper birth spacing should lead to behaviour change in terms of willingness to use FP methods to delay pregnancy. However, the SBCC communication does not appear to be following this logic. **Behaviour change does not appear linked to knowledge of risks or proper birth spacing**. Birth spacing knowledge is low (only about a third in 2020) and has not changed over the project cycle. However, there is considerably more knowledge regarding risks to early pregnancy. **About three quarters of Syrian women and nearly 90% of Lebanese mothers could cite risks for early pregnancy no matter the age group**. This has increased over the project cycle although the year-to-year averages are volatile. However, those **women with children under two years of age were LESS likely to be practicing contraception than mothers with children who were over two (- 10 ppt)** even though women with children under two are more at risk. It would be important to explore for why knowledge of risks does not lead to change.

This has implications for SBCC programming because **project activities geared to raise awareness on the risks of early pregnancy are not likely to be successful** because women already know the risks and still do not change their behaviour. On a positive note, the barriers to behaviour change do not appear to be linked to cultural values, so there may be potential for changes in the future if SBCC is properly focused. **Only a very low percentage of mothers reported that the reason that they are not using a delayed pregnancy method was because they or their husbands wanted more children** (less than 10%). The most common reasons for not using methods were because they were breastfeeding, did not like the methods, or were already pregnant. Since **breastfeeding does not delay pregnancy, this reflects a misunderstanding regarding delayed pregnancy tactics** and perhaps this is the point of focus to be taken in future SBCC.

Finally, **participation in Medair activities did increase the likelihood of using modern methods**. However, there is an anomaly in the patterns of participation. Participation in Medair activities is linked to changes in behaviour (discussing FP and using modern methods) but it is not liked to knowledge (risks and birth spacing). This is unusual because normally project activities affect changes in knowledge first before changes in practice. **It may be that Medair activities are targeting some other knowledge not connected to risks or birth spacing that is actually affecting behaviour more.**

In addition, FP practice is one of the few dimensions where being inside the SDC catchment area increases consultation, contraception and birth spacing. **This suggests that the SDCs have become a resource for intentional focus of FP service and could be further resourced in future programming activities related to FP.**

5.2.4   Birth Management

This category covers six discrete dimensions: ANC, Delivery, Maternal Mortality, Documentation, PNC, and breastfeeding practices. As a collective whole, this dimension is relatively positive in terms of current behaviour as well as changes in behaviour over time. There are some specific concerns on maternal mortality and PNC services yet that could be further addressed.

ANC visit: ANC appears to be a successful dimension with positive outcomes of which little extra attention is needed. **An increasing percentage of mothers have had at least four ANC visits during their pregnancy with 2020 levels extremely high (85%).** Nationality matters - about three quarters of Syrian mothers had four visits while nearly all Lebanese mothers did. **Dispensaries are continuing to play an important role in providing health service options to reduce the strain on the overall health system by being a resource for ANC service**. Syrian women were more likely to use dispensaries

while Lebanese women were more likely to use clinics. The relative differences between Syrian and Lebanese women on the number of visits is in the frequency of visits between the first and last months. Most mothers had their first visit within the first trimester and their last visit within the last month. The biggest change has been in the ANC visit during the first trimester where Syrian women increased by 15 ppt and Lebanese women by 10 ppt. The percentage having their last month visit stayed stable across the project cycle.

Delivery: The project logic is concerned about Syrian women have access to formal health care system and avoiding giving birth inside the ITS. There has been an increase across the project cycle in the percentage of Syrian women giving birth in the formal system (10 ppt) and by 2020 almost all mothers give birth in a hospital or clinic. The percentages giving birth in hospital have stayed stable for both groups over the time of the project and most increases are coming from Syrian mothers also accessing clinics as well. Concern over informal births in the ITS do not appear to be warranted any longer as practically all give birth in the formal system. The clinics have provided the important better local access to women that had been impeded by access in 2016.

The health system for delivery experiences a bottleneck because almost all mothers give birth in hospitals or clinics so there are fewer options for distributing health system support. The implication is that this may result in an overcrowded health system to be able to properly care for mothers. Two ways this might be expressed is through the use of C-sections (for better planning of doctor time) and through shortened hospital stays for mothers after delivery. **Both of these factors suggest that there is still a gap in institutional capacities to support delivery.**

The project measures the percentage of mothers having C-sections because of concern of the increase in C-sections as a matter of convenience for either the doctors or the mothers. **The percentage of C-sections in the sample is surprisingly high (between 35-40%)** even though it has declined since 2016 for Syrians although stable for Lebanese. Across the entire project years, Lebanese mothers are much more likely to have a C-section than Syrians (25 ppt). The reasons given for a C-sections were overwhelmingly because of a medical need. Less than 10% of the sample who had a C-section said that they had done so for personal preference.

Guidelines for delivery from the MOPH recommend that mothers should stay in hospital for a period of time after delivery to ensure proper monitoring the mother and child health. The recommendations are 48 hours for normal births and 72 hours for C-sections. In the sample, **very few mothers reported staying more than 24 hours (13.9% Syrians and 32.4% Lebanese) and this value has actually declined for Syrian mothers from 2016** (8 ppt) although has remained stable for Lebanese. More vulnerable women tend to stay shorter periods of time which could be indicative of treatment of vulnerable women in the institutions. **Future programming to expand institutional capacities in the formal health system for delivery may be important.**

Maternal Mortality: The percentages of mothers who died within one week of pregnancy are relatively small and declining over time (1.0% in 2020). However, even accounting for ambiguity in the time scope of when the mothers did, this low percentage would translate to a mortality per 100,000 live births rate that would be multiple times higher than the national rate for Lebanon. The rates are similar for both Lebanese and Syrian women suggesting that more could still be done on maternal mortality – especially in the context of improved health care services.

Registration: There are important differences in health documentation although there have been increases over the project cycle. Syrian mothers are less likely to report having received a health booklet (80%) while Lebanese mothers are almost unanimous. Lebanese mothers received a health booklet no matter where they gave birth, but Syrian mothers were 10 ppt LESS likely to receive a health booklet when giving birth at a clinic compared to a hospital. **This suggests that clinic documentation support could be further strengthened as part of overall support to expanded institutional capacity at delivery**. For Syrian refugees, birth registration is increasingly taking place in Lebanon as the protracted nature of the crisis expands. The percentage of children born in Syria in the sample has declined 25 ppt since 2016 to currently only 5.5%. The percentage of mothers reporting their child does not have a birth

certificate has remained stable across the cycle – but low at 6-7%. The percentage of children without birth certificates is higher for those children who were born in Syria where more than one-third of the Syrian-born did not have a birth certificate. Furthermore, nearly a third of the children without a birth certificate were less than six months old. Given these two factors combined with the overall high percentages with birth certificates, **the issue of birth certificates is not really a systemic issue, but more of a case management issue focusing on these children less than six months old or born in Syrian.**

PNC Visits: PNC visits are important both in terms of when they occur and how often they occur. **Within overall birth management, the frequency of PNC visits is one of the more notable gaps with few women receiving the recommended three PNC visits within 40 days.** Almost all mothers reported a medical check of their child at the time of delivery. Only about 4% of the women reported that their child received another medical check on the third day. **The substantive majority of mothers (80+%) did report receiving a PPC visit within the first two weeks, but less than 10% of the mothers reported receiving three PPC visits within 40 days**.

Syrians tended to get their PNC visits at dispensaries while Lebanese tended to use clinics. There has been an important shift in relative distribution across dispensaries, clinics, and hospitals since 2016. Dispensaries are much more frequently used for PNC visits, especially for Syrians (45 ppt increase since 2016). Hospital usage has declined substantively, especially for Lebanese (-38 ppt since 2016). **The increasing use of dispensaries and decline in hospital usage is important because it again affirms the project logic of the potential of the dispensaries to reduce the strain on other parts of the health system, but low numbers of PNC visits remain a challenge.**

Breastfeeding: Breastfeeding practices have increased over the cycle but are rarely exclusive breastfeeding. The World Health Organization (WHO) and UNICEF recommend that breastfeeding is initiated within the first hour of birth as it ensures that the infant receives milk that is rich in protective factors. Further, it is recommended to practice exclusive breastfeeding through the first six months as a means to help promote sensory and cognitive development and reduce susceptibility to diseases. **Almost all mothers reported breastfeeding their child within the first hour. This percentage has increased since 2016 for both Syrians (25 ppt) and Lebanese (10 ppt).** Although the WHO has expressed concerns over preferences for formula, the vast majority of women who did not breastfeed was because of the lack of milk which suggests **that SBCC activities focused on raising awareness may not change behaviour since the primary barrier appears to be a physical issue**. More than 80% of the mothers reported breastfeeding their child for six months. However, less than 10% of mothers in 2016 reported exclusive breastfeeding for the entire six months. Mothers whose infants are younger than six months do practice periods of exclusivity. Nearly 40% of the respondents reported exclusive breastfeeding within the past 24 hours. These patterns combined suggest that **mothers are willing to breastfeed and will breastfeed for an appropriate length of time, but long-term exclusive breastfeeding is rare** even though they will practice 24 exclusivity periodically throughout the first six months. This suggests that **the most useful point of focus in future programming may be to start with increasing the frequency of 24-hour exclusivity throughout the first six months**.

5.2.5 Vaccination Coverage

Vaccination coverage is an area of concern and should be an important component in future programming activities as it is one of the few dimensions where there are significant elements that have declined since 2016. **Vaccination coverage data is misleading because data is only recorded if it can be confirmed from reviewing the child's vaccine booklet**. This is appropriate to mitigate against memory recall errors, but a very low percentage of respondents – in both nationalities – had vaccination booklets. In 2020, just over 40% of the mothers could produce a vaccination booklet for their child. This value has actually declined since 2016 as well. Since it is unlikely that the children without vaccine booklets are better covered in terms of vaccinations, this means that the official statistics for vaccine coverage are over-estimating actual coverage. Interestingly, participation in Medair activities did increase the likelihood of mothers having a booklet and suggests that **Medair activities can have a positive effect on vaccine booklet maintenance in future programming.**

The percentage of children in the sample vaccinated for measles has decline by about -18 ppt for Syrian children and about -8 ppt for Lebanese children. The 2020 values for measles coverage are slightly more than half of the sample (58%). For Polio, the situation is better with about three quarters (74.1%) of Syrian children in 2020 having polio coverage and about 80% of Lebanese. DPT vaccination coverage is a similar percentage – about 70% of Syrians and 80% of Lebanese. **While measle vaccination coverage has declined since 2016, both Polio and DPT have seen small increases.** Lebanese children are more likely to have vaccine coverage on all three of these vaccines compared to Syrian children. In addition, **mothers who cannot read or write are much less likely to have a vaccine booklet (-6.6 ppt) AND are also much less likely to have measles (-8.7 ppt), polio (-11.7 ppt) or DPT (-11.2 ppt) when they do have the booklet**.

There are 15 vaccines recommended for children under two in the MOPH guidelines. Among those children with vaccine booklets, only about one-third had recorded all age-appropriate vaccines. **There has been a gradual increase in overall vaccine coverage since 2018.**[135] Since the midpoint of the cycle, the percentage of Syrian children with all vaccines has increased by 10 ppt while it has increased by 25 ppt for Lebanese children. The average number of vaccines per child has also increased from to 9.8 per Syrian child in 2020 and 12.0 per Lebanese child. There is a substantial difference by nationality where Lebanese children were more likely to have all vaccines compared to Syrian (23.5 ppt difference). As with the three individual vaccines, mothers who could not read or write were much less likely to have all age-appropriate vaccines (-12.3 ppt).

5.2.6 PSS Services and Access

Because of the stress and trauma associate with humanitarian crises, PSS services are often a point of focus in project activities. **While a substantive majority of respondents throughout the entire project cycle cited needing PSS support (usually around 75%) only a small fraction made use of PSS services**. Knowledge of PSS services and where to locate them is low and actually accessing them is relatively rare. When respondents do think of PSS sources of support, they are more likely to think of informal sources such as family and friends than trained service providers. **Participation in Medair activities makes a big difference on all PSS factors – services available, where to go, using trained service providers, and actually accessing PSS support.**

The PSS services assessed in the survey were support groups, counselling, medicine, and social workers. **By 2020, about one-third of respondents could name at least one PSS service available**. This percentage increased since 2016 for Syrians (14 ppt) although it remained stable for Lebanese. By far the most commonly cited service was support groups followed distantly by counselling. The PSS services appear to be closely associated in respondents' minds to the SDCs as a service provided by the SDCs because those living outside the SDC catchment areas were much less likely to cite any PSS service. **About 45% of the respondents in 2020 could cite at least one place to go for PSS support. However, most of these areas of support were family, friends, or religious figures**. A much lower percentage could cite a PSS location that was a trained service provider (18% and 25.2% respectively). This percentage had stayed relatively constant over the project cycle period. Because of this, although about a quarter of respondents did report having discussed PSS with someone, only about 15% of respondents discussed PSS with a trained service provider.

When specifically asking about whether they had access PSS support (as opposed to discussing PSS), about half of the respondents reported having accessed PSS support in 2020. This represented a small increase from 2016 for Syrians but stable percentages for Lebanese. However, this PSS support was primarily from informal sources. **Only 2.1% of Syrians and 5.0% of Lebanese in 2020 reported accessing PSS from a specialized service.** This percentage has held stable across the project cycle suggesting that behaviour has not changed. **When mothers do seek PSS support which is about half the time – they will do so from informal sources.** They have not yet become accustomed to considering PSS support from specialized services.

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[135] 2017 figures are unusual enough that there may have been a different sampling approach in that year.

5.3   Additional Considerations
5.3.1   Social Factors Influence on Programming

Nationality: Among the six social factors, nationality has the most influence in the distribution of responses. Vulnerable Lebanese are consistently better responses on health knowledge and behaviour across the majority of the indicators. **The effect is large with often a 15-25 ppt difference between Syrian response percentages and Lebanese response percentages**. It is true that Lebanese families are less likely to not be able to read or write and they are less likely to have been married before 18. However, even when controlling for these factors, the specific influence of nationality is significant. This is not necessarily surprising because the disruption of social connections, relationships, and economic ties that come from displacement for refugees has a disproportionately negative effect even when other factors are equal. In many indicators, the patterns across the cycle were that there would be an increase in Syrian behaviour from 2016 while with Lebanese respondents the patterns stayed more consistent. **Because Lebanese response percentages were higher to begin with, this had an effect of often bringing Syrian responses closer to Lebanese responses by 2020**.

Literacy Levels: The second most influential social factor, after nationality, is whether the respondent can read or write. **Women who cannot read or write are less likely to have appropriate health knowledge or behaviours – especially those elements that have to do with management or maintenance**.   For example, maintaining and updating vaccination booklets, managing birth registration. Women who cannot read or write are also more likely to rely on the dispensaries as the primary source for health services. **There may be some gains in health coverage in future programming oriented towards supporting SDCs to strengthen their capacity for non-literate clients**. In addition, given the degree of influence literacy has on health behaviours, **it may be useful in future programming to integrate an adult literacy component** into project activities as an indirect way of improving health knowledge and practices.

Early Marriage: Early marriage can be one marker of increased vulnerability. **Being married before the age of 18 does have an influence on health behaviours. However, early marriage does not have the same degree of influence as literacy levels.** In none of the indicators did early marriage appear as a factor while literacy levels did not. But there were many cases where literacy did appear as an influence when early marriage did not. What this means is that although early marriage and literacy levels are both proxy indicators for vulnerability, literacy has the stronger influence, and it is likely the correlation between early marriage and literacy that is driving the significance of early marriage in some indicators. While the phenomenon of early marriage is associated with vulnerability, **there is relatively little that can be done in an MCH project focus**. Participants are mothers who are already married – whether early or late – and project activities about early marriage will not actually affect what has already happened. This is likely why there has been little change in this social indicators – early marriage or literacy- since the project cycle began.

SDCs: SDCs as a whole have played a significant role in the provision of health services – especially to vulnerable populations. Syrians have greater needs in health knowledge and behaviour than Lebanese and they rely more on the SDCs to access these services. This has led to reduced strain on the other elements in the formal health system and helped improve access to services. However, **the findings of a household survey on behaviours are less useful to assess whether there are variations in performance *among* the SDCs themselves**. The survey is reporting on the health knowledge and behaviour of the mothers rather than as a tool for assessing SDC quality. Nevertheless, in spite of these caveats, there was observed in a substantive majority of the indicators, that there were statistically significant variations among the response rates when disaggregated by SDC. Often, this significance was a illusionary because it would be a situation where there was a cluster of SDCs around similar ranges, but the lowest value in the range and the highest value in the range were sufficiently far apart to be statistically significant, even though each specific comparison with the next closest SDC would not have been statistically significant. However, **even so, there is a consistent enough pattern among the**

SDC response rates that it may be worthwhile to build on this in future programming and develop an SDC specific checklist or monitoring tool.

Catchment Location: **There are few differences between responses from those living inside the catchment areas and those living outside the catchment areas on most of the behaviour and knowledge indicators**. The primary difference is that those living outside the catchment areas are less likely to use the SDCs for their health coverage, but they are getting their health coverage from somewhere. Those living outside the catchment area are more similar to Lebanese respondents in terms of using an array of clinics and hospitals to access health services.

Participation in Medair Activities: Medair project activities are a combination of system strengthening support to the functioning of SDCs and SBCC activities with targeted beneficiaries. Participation in the SBCC types of activities were not associated with many indicators that were measuring system capacity in some manner. However, **there were four areas where the participation in Medair activities influenced the patterns of responses**. The first is increasing the connection between Medair activity participants and **the use of Medair SDCs**. The activities appear to serve a channelling function bringing participants into the SDC centres. Secondly, within **the RH dimension**, participation in Medair activities was linked to improved knowledge of locations for accessing RH services and for knowledge specifically of ANC and STI. It was also associated with changes in RH seeking services. **In PSS**, participation was associated with knowledge of PSS services and locations, feeling comfortable with accessing PSS services, and behaviour related to seeking PSS support from trained service providers. Finally, in **Family Planning**, participation in Medair activities was associated with women seeking out FP discussions and practicing modern methods. What is unusual about the latter is that while participation in Medair activities was associated with changes to actions in FP, it was not associated with changes to knowledge of risks or birth spacing. **Given that PSS, FP, and STI are substantive gaps in the logframe accomplishments, it would be worthwhile in future programming to continue to emphasize these activitie**s.

5.3.2   Summary Logframe Patterns and Implications for Future

Summary tables profiling all indicators and their respective values are found in Annex 4 (2020 dataset) and Annex 5 (Multi-Year Dataset). The Annex 5 table highlights which indicators have increased since the start of the project cycle, which have stayed stable or volatile (meaning few conclusions can be drawn) and which have declined. Overall, there has been progress on most indicators across the project cycle. Of the 47 indicators profiled, 25 show positive changes and only 2 show a negative change (measles coverage and staying in hospital more than 24 hours). The remainder are stable or volatile.

However, even though there has been progress, in many of the themes, response rates are not yet close to a potential maximum and there are some areas that could be addressed in future programming including:

There have been improvements in **health seeking behaviour and declines in incidence of ARI, Diarrhoea and NCD** which suggests positive improvements in the general WASH environment as well as improved lifestyle environment. Treatment behaviour has stayed constant throughout the cycle, and there are positive increases in ORS usage. There is an **unusual increase in the use of painkillers and antihistamines for ARI** treatment.

Reproductive health knowledge has increased over the cycle, but this is largely focused on ANC ad PNC. Most respondents **do not consider FP or STI and most know of only one place to access RH services**. Family planning practices have improved but there are still gaps in terms of **consultation, contraceptive use, or birth spacing practices.**

 While overall the birth management cycle is strong, there are **gaps yet in systemic capacities of the health system to meet the demand** because there are fewer options for birth. Because of this, there are problematic patterns in **staying in hospital, the use of C-sections, maternal mortality, and appropriately frequent PNC care**.

Among vaccinations, there is a fundamental under-reporting of vaccine coverage due to the low levels of **vaccine booklet management**. **The decline in measles coverage and low percentages of age-appropriate vaccines** are gaps to address further. Programming around increased quality of management of the vaccine booklets may have an outsize effect on vaccination coverage and should be considered in future programming.

In terms of percent of respondents using services, the biggest shortfall is for **accessing PSS support**. PSS knowledge about services or locations are not well known and very **few mothers access PSS services** from trained service providers even though three quarters of the respondents reported some type of PSS need. Mothers still prefer to access whatever PSS support they do receive from informal sources and are **not accustomed to using trained service providers**.

6 Recommendations

Throughout the analysis of the findings and conclusions, a number of elements have been highlighted for potential considerations in future programming. However, in any evaluation, too many recommendations can become the functional equivalent of no recommendations. Too many items for consideration can inhibit focus on any particular item. To this end, the evaluation presents only nine recommendations although the Lebanon office should feel free to consider additional recommendations that may be relevant to their programming context. The recommendations are organized to respond to potential future programming.

Recommendation 1:Adult Literacy. Given the prevalence of literacy as an influencer on patterns, consider integrating into future programming additional investment in activities around the promotion of adult literacy for mothers given the effect that literacy has on health behaviours and knowledge. Alternatively, for those variables with significant differences between literacy levels, consider developing materials or training methods which are more friendly for non-literate women.

Recommendation 2: SDC Assessment. Consider development of an in-depth SDC assessment tool to provide additional detail on the functioning of individual SDCs. There is enough variation among the SDCs even when controlling for socio-demographic factors that follow up assessing individual SDC performances and quality would be a useful next step for providing increased quality of service.

Recommendation 3: Birth Institutional Capacity. Consider programming that seeks to strengthen the institutional capacity of the formal hospitals and clinics for birth delivery demands. Increasing the capacity for absorption should be accompanied by awareness raising activities directed to doctors and medical officials on three items:
   i)   increasing length of stay in hospital after birth,
   ii)   decreasing reliance on C-sections, and
   iii)   assessments of conditions that may be contributing to maternal mortality.

Recommendation 4: SDC Post-Delivery Support. In combination with recommendation 3, to improve the SDC support to mothers post-delivery, consider adding support to SDC capacity to carry out.
   i)   Registration case management support to mothers whose children are either: a) 0-6 months, or b) were born in Syria, to help them acquire birth certification.
   ii)   Increasing capacity of SDCs to provide sufficiently frequent PNC visits and care to mothers within the first 40 days of delivery.
   iii)   Breastfeeding training provided by SDCs to focus on increasing the frequency of 24-hour exclusivity during the first six months.

Recommendation 5: Family Planning and SBC. Adjust SBCC activities around family planning practices to take into account that knowledge of risks does not appear to lead to behaviour change and

that reasons for not using contraception are not likely associated with preference for more children. These adjustments should provide special attention to activities that encourage:

      i)   increased consultation on FP with trained providers,

      ii)   increased use of modern contraceptive practices,

      iii)   increased knowledge of appropriate contraceptive practice and birth spacing needs.

Recommendation 6: Vaccination Coverage. To strengthen vaccination coverage, consider integrating into new activities two areas of focus:

      i)   a campaign for mass vaccination of measles,

      ii)   increased training to mothers – especially ones who cannot read or write – on care and management of vaccine booklets.

      iii)   Strengthening the vaccination tracking system to include SDC nurses calling the mother of the child to remind her of an appointment when a child is due to receive a specific vaccine.

Recommendation 7: ARI and Painkillers. Adjust SBCC activities related to treatment of ARI to take into account the increased use of painkillers for ARI treatment.

Recommendation 8: PSS Services. Strengthen PSS services programming support through two mechanisms:

      i)   strengthening the capacity of the informal sources of support which are the preferred option of mothers through peer-to-peer learning or lay-person capacity strengthening to provide basic tools to informal sources for adequate PSS support.

      ii)   increasing the utilization of trained service providers for PSS support.

Recommendation 9: Survey Reliability. Adjust the survey questions for future programming to reduce reliability issues that come from either questions that may confuse respondents or which they may not have the knowledge to know. This includes:

      i)   Tracking medicine usage and the distinctions between antibiotics, antihistamines, or painkillers

      ii)   Replacing 'satisfaction' questions for RH and PSS services with a checklist of actions that were or were not done with the respondent when they accessed the service.

      iii)   Adding specific questions regarding comfort and access to FP and STI services rather than general RH services.

      iv)   Asking for medical reasons for actions that may be beyond the respondents' knowledge (such as cause of death, reasons for C-sections, among others)
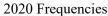
7   Annexes

7.1   Annex 1: Terms of Reference

📄 RFP.docx

7.2   Annex 2: Results Analysis Framework

📄 Analysis Framework 2020 Revised II.docx

7.3   Annex 3: Additional Frequency Distribution and Graphs

2020 Frequencies

📊 Results by indicators_MEDAIR Ev

Multi-Year Frequencies

📊 Results by indicators Multiyear 16-20_MED

Multi-Year Graphs

📊 Multi Year Graphs.xlsx

7.4   Annex 4: Summary Table for all 2020 Indicators

📄 Indicator Summary Table 2020.docx

7.5   Annex 5: Summary Table for all Multi-Year Indicators

📄 Table Multi year indicators.docx