Policy Brief

Reducing Preventable Preterm Deliveries among Syrian Refugees in Lebanon

K2P Policy Briefs bring together global research evidence, local evidence and context-specific knowledge to inform deliberations about health policies and programmes. It is prepared by synthesising and contextualizing the best available evidence about the problem and viable solutions through the involvement of content experts, policymakers and stakeholders.

Policy Brief

+ Included

Description of a health system problem

Viable options for addressing this problem

Strategies for implementing these options

× Not Included

Does not make **recommendations**

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K2P Policy Brief

Reducing Preventable Preterm Deliveries among Syrian Refugees in Lebanon

UNHCR
The UN Refugee Agency
REPUBLIC OF LEBANON
MINISTRY OF PUBLIC HEALTH
Knowledge to Policy Center K2P

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Key Messages

The problem

Preterm deliveries are associated with high newborn morbidity and mortality rates among Syrian refugees. Children under one year of age constitute the majority of mortalities among Syrian refugees in Lebanon (61%), with preterm deliveries being the highest contributor to those deaths (26%).

Elements of a comprehensive approach

Element 1› Strengthen accessibility to antenatal and postnatal care

- Strengthening accessibility to antenatal and postnatal care increases awareness to potential danger symptoms and potential obstetric complications, early detection of serious pregnancy complications leading to a positive impact on pregnancy outcomes.
- Financial incentives (i.e. conditional cash transfer, vouchers, removing user fees) and health insurance are effective strategies to improve access to health care services.

Element 2› Improve the quality of services delivered in health care centers by accrediting primary health care centers and integrating evidence-based guidelines

- Health care accreditation standards in various countries including LMICs improved the organizational productivity, promoted ethical frameworks, enhanced quality of care and patient safety and increased patient and provider satisfaction.
- Evidence-based practices (i.e. guidelines) ensured a higher quality of care as a result of a significant improvement in skills, knowledge, and attitude of providers.

Element 3› Integrate task shifting into antenatal care in primary health care centers

- Task shifting increases access to care and improves the quality of care delivered while reducing preterm deliveries.
- Nurse-led care led to an increase in patient satisfaction and a reduction of hospital admission and mortality.
- Training a midwife in every village with defined responsibilities during pregnancy, delivery and postpartum care resulted in increased professional attendance.

Element 4› Enhance outreach community-based interventions on family planning and antenatal care

- Community-based interventions (CBI) such as outreach programs and community mobilization significantly decrease neonatal and perinatal mortality, stillbirths, maternal morbidity, hospital admission and C-section.
- Awareness and education sessions through home visits by community health workers and community mobilization activities increase the mother's knowledge of complications.
- The implementation of a CBI such as family planning and birth spacing may reduce pregnancy complications (i.e. preterm) and improve maternal health.

Implementation considerations

To ensure maximum effectiveness in reducing preterm deliveries and promoting maternal and neonatal well-being, a variety of implementation considerations need to be kept in mind at the level of patients, professionals, organizations, and systems.

الرسائل الأساسية

تعريف المشكلة

تشير الإحصائيات إلى ارتباط معدلات الولادات المبكرة بارتفاع معدلات وفيات الأطفال الخدّج وحديثي الولادة ومعدلات المراضة في أوساط اللّاجئين السّوريين. ويشكل الأطفال ممّن لا يتجاوز عمرهم السنة الواحدة أغلب الوفيات في أوساط اللّاجئين السّوريين في لبنان (61%)، حيث تشير التقديرات أيضاً أن الولادات المبكرة هي العامل الأبرز من بين العوامل التي تتسبب بهذه الوفيات (26%).

ما الذي نعرفه حول أربعة عناصر يتم اعتمادها في المقاربات لمعالجة هذه المشكلة؟

العنصر الأول> تعزيز قدرة المرأة الحامل على الوصول إلى الرعاية الصحية خلال الحمل والولادة وما بعد الولادة

- ← إنّ دعم قدرة المرأة الحامل على الوصول إلى الرعاية الصحية المطلوبة خلال الحمل والولادة وما بعد الولادة يساهم في زيادة الوعي والكشف عن أيّة عوارض قد تتعلق بصحة الجنين، خاصة وأن الكشف المبكر عن مثل هذه المخاطر ينعكس إيجاباً على صحة الأم والمولود.
- ← إنّ الحوافز المالية (مثل التحويلات المالية المشروطة، والقسائم، والإعفاء من بعض رسوم استخدام الخدمات الصحية) وخدمات التأمين الصحي من الاستراتيجيات الفعّالة في تحسين القدرة على الوصول إلى خدمات الرعاية الصحية

العنصر الثاني> تحسين جودة خدمات الرعاية التي تقدمها المراكز الصحية من خلال برامج إعتماد لمراكز الرعاية الصحية الأولية ومن خلال المبادئ التوجيهية المبنية على البراهين العلمية

- ← إنّ معايير اعتماد الرعاية الصحية الأولية في مختلف الدول، بما في ذلك الدول ذات الدخل المتوسط والمنخفض، تساهم في تحسين الإنتاجية المؤسساتية وتعزيز الأطر الأخلاقية للرعاية، وتحسين جودة الرعاية وسلامة المرضى، ورفع معدلات الرضى في أوساط المرضى ومقدمي خدمات الرعاية على حد سواء.
- ← إنّ الممارسات المبنية على البراهين العلمية والموثقة (مثل المبادئ التوجيهية) تضمن جودة أعلى على مستوى خدمات الرعاية، وذلك لما لها من فائدة في تحسين مهارات مقدمي خدمات الرعاية ومعرفتهم وسلوكياتهم.

العنصر الثالث> اعتماد مبدأ تحويل المهام في مراكز الرعاية الصحية الأولية للأم والطفل.

- ← إنّ تحويل المهام يعزّز القدرة على الوصول إلى الرعاية ويساهم في تحسين جودتها والحدّ من الولادات المبكرة.
- ← إنّ تولي الممرضين والممرضات مسؤولية الإشراف على الرعاية الصحية أدى إلى ارتفاع معدلات رضى المرضى وخفض معدلات الاستشفاء والوفيات.
- ← إنّ تدريب قابلة قانونية في كل قرية وتكليفها بمسؤوليات معيّنة خلال الحمل والولادة وما بعد الولادة يساهم في إبقاء الأم والطفل في دائرة الرعاية المتخصصة.

العنصر الرابع> تحسين التدخلات المتعلقة بالتوعية والتخطيط الأسري والرعاية المتعلقة بالحمل والولادة

- ← إنّ التّدخلات التي تركّز على المجتمع المحلي (Community-Based Interventions) مثل برامج التواصل والتوعية وتحفيز المجتمع المحلي، هي تدخلات يمكن أن تساهم بشكل ملحوظ في الحدّ من معدلات الوفيات والمراضة لدى الأمهات والأطفال الخدّج خلال مراحل الحمل والولادة وما بعد الولادة، وكذلك تساهم في الحدّ من معدلات وفاة الجنين أو ولادة جنين ميت، ومعدلات الإستشفاء ومعدلات الولادات القيصرية.
- ← إنّ الحصص التثقيفية والتعليمية التي تتمّ من خلال الزيارات المنزلية لأفراد متخصّصين في الصحة من المجتمع المحلي، وأنشطة الدعم ورفع الوعي، تساهم في زيادة اطلاع الأم على أيّة مضاعفات محتملة وكيفية التعامل معها.
- ← إنّ تطبيق تدخلات ضمن المجتمع المحلي، مثل التدخلات المتعلّقة بالتخطيط الأسري والمباعِدة بين الولادات، يساهم في الحدّ من مضاعفات الحمل والولادة (أي الولادات المبكرة) وتحسين صحة الأم والجنين/الطفل.

ما هي العوامل التي يجب أخذها بعين الاعتبار عند التطبيق العملي؟

هناك عدة عوامل يجب أخذها بعين الاعتبار على مستوى المرضى ومتخصّصي الرعاية الصحية والمؤسسات والأنظمة، وذلك لضمان أقصى فعالية ممكنة في الحدّ من الولادات المبكرة والسابقة لأوانها، ودعم صحة الأم والجنين.

Summary

K2P Policy Brief

The Problem

Preterm deliveries are associated with high newborn morbidity and mortality rates among Syrian refugees. Children under one year of age constitute the majority of mortalities among Syrian refugees in Lebanon (61%), with preterm deliveries being the highest contributor to those deaths (26%).

Size of the Problem

Preterm delivery has been identified as a global problem associated with high newborn morbidity and mortality rates (Beck et al., 2010). Preterm birth complications are the number one direct cause of death among children under 5 years of age, leading to nearly 1 million newborn deaths per year (WHO, 2016).

Premature labor or preterm birth is defined as children born prior to the completion of 37 weeks of gestation (WHO, 2016).

There are 3 levels of preterm deliveries

- Extremely preterm (<28 weeks)
- Very preterm (28 to <32 weeks)
- Moderate to late preterm (32 to <37 weeks).

Premature babies are at higher risk of intrapartum and postpartum complications (UNHCR, 2012; Blencowe et al., 2013), which may require long-term prolonged care that will result in a high burden on the health care system and the family of the child (Beck et al., 2010; Petrou et al., 2001; Blencowe et al., 2013). In Lebanon, premature births were estimated to be 8.3% in 2007, with the majority (73.5%) born in the late preterm phase (34-36 weeks) (Younis, 2007).

Despite the absence of data on the prevalence of preterm births among Syrian refugees, the available data indicate that preterm deliveries are the highest contributor to deaths in children under one year of age (26%) (UNHCR, 2015a). This places Lebanon in a critical state when it comes to achieving the third sustainable development goal. In addition, the current high percentage of households with pregnant or lactating women as well as the burden of preterm deliveries on the child, family and healthcare system highlight the urgent need to improve access to and quality of services for the prevention and management of preterm deliveries among Syrian refugees in Lebanon.

Underlying Factors

The following section focuses on the underlying factors at the governance, financial and delivery arrangement levels of the health system, in

addition to medical and sociopolitical factors that may have contributed to the problem.

At the **governance level**, although the UNHCR and MOPH are providing primary health care services for Syrian refugees, there remains a lack of primary health care centers that provide those services. Moreover, the Syrian refugees cannot benefit from the Comprehensive Primary Health Care (PHC) Project that the MOPH (MOPH, 2015) has initiated which raises the need to scale up or develop a similar package to cover Syrian refugees. Moreover, Lebanon lacks a robust referral system, especially for Syrian refugees, which was a major barrier to improving the maternal health outcomes and reducing maternal morbidity and mortality rates (El Kak & Ammar, 2016).

At the **financing level,** UNHCR has increased the refugees' contribution to hospital bills (Blanchet et al., 2016). However, for refugees who are assessed as severely vulnerable and those admitted for neonatal intensive care, UNHCR covers 90% of the costs since April 2016 with a maximum contribution of 13500 USD. In addition, despite subsidies for PHC services provided by the UNHCR and MOPH, the cost for care remains the main barrier to accessing ANC (Kabakian-Khasholian, Mourtada, Bashour, El Kak and Zurayk, forthcoming).

At the **delivery level,** the lack of trained health care workers to address refugees' health issues has influenced the quality of care provided in healthcare centers (Benage et al., 2015). Moreover, despite the UNFPA's efforts to provide training for midwives, healthcare workers, and local community members, there is still need to train more health care workers and to further raise awareness among refugees.

Limited access to ANC is an important factor affecting the prevention and management of preterm deliveries among Syrian refugees. Access to ANC has decreased from 2015 to 2016 (UNHCR, 2016) with only 53% of Syrian refugees attended ANC in the first trimester. Some of the most frequently reported barriers to accessing ANC include, the cost of care, unawareness of the necessity of the care and mistrust in the quality of care provided.

Similarly, access to postnatal care is significantly low among Syrian refugees with only 26% registered Syrian refugees accessing postnatal care, mainly due to their lack of knowledge of the services' availability (UNHCR, 2016).

At the **medical level**, some of the risk factors for preterm deliveries were noted in the Syrian refugees, which include, hypertension, diabetes (UNHCR, 2016), previous delivery by C-section (UNHCR 2015a).

At the **sociopolitical level**, the most recent political turmoil in Syria has shown to have a serious interruption of maternal health and increased vulnerability of pregnant women to medical complications, risks of

pregnancies (i.e. prematurity) and increased maternal morbidity and mortality (Benage et al., 2015; El Kak & Ammar, 2016) among Syrian refugees. The female refugee's exposure to sexual violence, poverty, insecurity, poor hygiene, poor nutrition are significantly associated with preterm delivery (Büyüktiryaki et al., 2015; Benage et al., 2015; Masterson et al., 2014; Hetherington et al., 2015; Agrawal and Hirsch, 2012). Also, the Syrian refugees' low socioeconomic conditions have caused them to marry off their girls at an early age. This, in turn, was significantly associated with pregnancy complications, low birth weight, preterm labor, and inadequate ANC (Benage et al., 2015; Eshghizadeh et al., 2015; Serhan & Anini, 2015; Abu Hamad et al., 2007). Furthermore, culture and perceptions play a crucial role in family planning (Kabakian-Khasholian et al., forthcoming). Less than 45% of them use contraceptives (Benage et al., 2015), which was mainly due to cultural perceptions (Kabakian-Khasholian et al., forthcoming).

Elements of a comprehensive approach to address the problem

The following four elements form part of a comprehensive approach to tackling the issue of preterm deliveries, and therefore can be adopted either independently or could complement one another.

Element 1

Strengthen accessibility to antenatal and postnatal care

Timely access to ANC and postnatal care (PNC) is critical for the health and survival of both the mother and the newborn (Mrisho et al., 2009; Bhutta, Ali, Cousens & Ali, 2008). The use of ANC early in the pregnancy is considered important to ensure that risks are detected, appropriate ANC is arranged and women are registered or 'booked' for delivery at the appropriate level of care, mainly in order to improve pregnancy outcome (Mathole, Lindmark, Majoko, & Ahlberg, 2004). Postnatal services are perceived to be both important and routinely provided (Mrisho et al., 2009).

Financial constraint is a major barrier to ANC accessibility especially among Syrian refugees (Malqvist, Yuan, Trygg, Selling & Thomsen, 2013; Lewin et al., 2008; Kiwanuka et al., 2008; Downe, Finlayson, Walsh & Lavender, 2009). As such, financial incentives (i.e. conditional cash transfer, vouchers, removing user fees) and health insurance are effective strategies to improve access to health care services.

Element 2

Improve the quality of services delivered in health care centers by accrediting primary health care centers and integrating evidence-based guidelines

Primary health care accreditation

One increasingly employed method to improve the care provided in current PHCCs in Lebanon is accreditation, which has been reported to be among the most effective means to measure healthcare organization performance (Jovanovic, 2005). The effectiveness of accreditation has been portrayed in various studies, which included, improving the organizational productivity, promoting ethical frameworks, enhancing the quality of care and patient safety and increasing patient and provider satisfaction.

Evidence-based guidelines

There is growing interest in evidence-based guidelines in the current health care field which mainly aims to improve the effectiveness of care (Bahtsevani, Udén, Willman, Blekinge Tekniska, & Sektionen för, 2004) and ensures higher quality of care as a result of significant improvement in skills, knowledge and attitude of providers (Bahtsevani et al., 2004; Dizon, Grimmer-Somers, & Kumar, 2012; Flodgren, Rojas-Reyes, Cole, & Foxcroft, 2012; Flores-Mateo & Argimon, 2007; Lugtenberg, Burgers, & Westert, 2009; Menon, Korner-Bitensky, Kastner, McKibbon, & Straus, 2009; Scurlock-Evans, Upton, & Upton, 2014; Ubbink, Guyatt, & Vermeulen, 2013).

Element 3

Integrate task shifting into antenatal care in primary health care centers

Task shifting is a process of reallocating duties from one health care worker to another with less experience or qualifications (Laurant et al., 2005). Task shifting was shown to increase access to care, improve the quality of care, and reduce preterm deliveries (Turienzo et al., 2016; Sandall et al., 2016; Lassi & Buhta, 2015; Lewin et al., 2008; Laurant et al., 2005; Horrocks et al., 2002, Martinez-Gonzalez et al. 2014)

Moreover, nurse-led care may lead to better quality of care (Horrocks et al., 2002; Laurant et al., 2005), increased patient satisfaction was higher when nurses, reduced risk for hospital admission and maternal and neonatal mortality (Martinez-Gonzalez et al. 2014). Also, training a midwife in every village with defined responsibilities during pregnancy, delivery and

postpartum care resulted in increased professional attendance. (Yuan et al., 2014).

Element 4

Enhance outreach community-based interventions on family planning and antenatal care

Community participation has been recognized as an essential element in supporting maternal and neonatal healthcare services delivery for pregnant women and mothers (Lassi, 2010). In the case of the Syrian refugees, the most needed community-based interventions are family planning and ANC, considering that delaying and spacing births may reduce pregnancy complications (i.e. preterm) and improve maternal health (Wilcher, 2010). Most importantly, in order to improve the uptake of CBI, it is essential to have community members participating in CBI and build strong relations with local NGOs.

Implementation considerations

Barriers to implementation can be overcome at the patient, professional, organizational and system levels.

- Raising awareness on the purpose of ANC and family planning to impact women's attendance to ANC and their use of family planning methods (i.e. contraceptives).
- Subsidizing healthcare cost to increase contraceptive use
- Training health care workers is essential in providing targeted maternal care
- Creating legislations for all health professionals, would protect against unfair conduct and reduce conflict with current health professional regulations and licensure.
- Engaging the community eases the implementation of CBI
- Simplifying evidence-based guidelines facilitates its implementation
- Building Capacity for staff working at PHCCs in Lebanon should be done in parallel with the implementation of accreditation programs
- Providing financial assistance and monitoring from authorities such as the Ministry of Public Health (MOPH) in Lebanon is essential to support PHCCs in the implementation accreditation
- Implementing accreditation in Lebanon should ensure the development of clear policies, procedures, and guidelines prior to the implementation of accreditation

موجز السياسات الصحية

تعريف المشكلة

يشمل تعريف الولادة المبكرة أو السابقة لأوانها جميع الأطفال الخدّج الذين ولدوا قبل إكمال 37 أسبوعاً في الرحم (*WHO, 2016*)

ويتمّ تصنيف هذه الولادات في ثلاثة فئات:

- الولادات السابقة لأوانها بوقت كبير (بعد أقلّ من 28 أسبوعاً من الحمل)
- الولادات السابقة لأوانها بوقت متوسط (من 28 إلى 32 أسبوع)
- الولادات السابقة قليلاً لأوانها (من 32 إلى 37 أسبوع)

تشير الإحصائيات إلى ارتباط معدلات الولادات المبكرة بارتفاع معدلات وفيات الأطفال الخدّج وحديثي الولادة ومعدلات المراضة في أوساط اللّاجئين السّوريين. ويشكل الأطفال الذين لا يتجاوزون السنة الواحدة من العمر أغلب الوفيات في أوساط اللّاجئين السّوريين في لبنان (61%)، حيث تشير التقديرات أيضاً الى أنّ الولادات المبكرة هي العامل الأبرز من بين العوامل التي تتسبّب بهذه الوفيات (26%).

حجم المشكلة

تعتبر الولادات المبكرة مشكلة عالمية ترتبط بها مشكلة ارتفاع معدلات الوفيات في أوساط الأطفال الخدّج وحديثي الولادة (*Beck et al.*، 2010). وتعتبر المضاعفات الناتجة عن الولادة المبكرة السبب المباشر الرئيسي للوفيات بين الأطفال (ممن لا تتجاوز أعمارهم الخمس سنوات)، بمعدلٍ يقارب مليون طفل حديث الولادة سنوياً (*WHO*، 2016).

ويواجه الأطفال الحديثو الولادة معدلات أعلى من المضاعفات سواء خلال الولادة أو بعدها (*UNHCR*، 2012؛ *Blencowe et al.*، 2016)، مما يتطلّب رعاية مطولة وهذا أيضاً يعني عبئاً أكبر على نظام الرعاية الصحية وأسرة الطفل (*Beck et al.*، 2010؛ *Petrou et al.*، 2001؛ *Blencowe et al.*، 2016). وفي لبنان، قُدّرت معدلات الولادات المبكرة بحوالي 8.3% من مجمل الولادات في 2007، وأتت أغلبيتها في المرحلة الأخيرة من الحمل (34-36 أسبوع) (*Younis*، 2007).

وبالرغم من غياب الإحصائيات عن معدلات الولادة المبكرة في أوساط اللّاجئات السّوريات في لبنان، فإن البيّانات المتوفّرة تشير إلى أنّ الولادات المبكرة هي العامل الرئيسي بين أسباب الوفاة لدى الأطفال ممن لم يتجاوزوا السنة الواحدة

من العمر (26%)(*UNHCR, 2015*). وهذا الأمر يضع لبنان في حالة حرجة من ناحية تحقيق الهدف الثالث من أهداف التنمية المستدامة *(Sustainable Development Goals)*. كما أنّ النسبة المئوية الحالية المرتفعة للأسر التي تضمّ نساءً حوامل أو مرضعات وكذلك عبء الولادات المبكرة على النظام، والطفل، والأسرة والرعاية الصحية، يسلّط الضوء على الحاجة الملحّة لتحسين الوصول إلى الخدمات الصحية ذات الجودة للوقاية قدر الإمكان من الولادات المبكرة والإشراف المتخصّص على هذه الولادات في أوساط اللّاجئين السّوريين في لبنان.

العوامل المسببة

يركز القسم التالي على العوامل التي تساهم في زيادة حجم المشكلة، وتختلف هذه العوامل في طبيعتها ومستوياتها عبر النظام الصحي، سواء على مستوى الحوكمة أو على مستوى تكلفة الخدمات والترتيبات المتعلقة بتقديمها، بالإضافة إلى العوامل الطبية والاجتماعية والاقتصادية التي قد تساهم في المشكلة.

على **مستوى الحوكمة** تقدم المفوضية السامية لشؤون اللّاجئين في الأمم المتحدة ووزارة الصحة العامة في لبنان خدمات الرعاية الصحية الأولية للّاجئين السّوريين، لكن هناك نقص في مراكز الرعاية الصحية الأولية التي تقدم هذه الخدمات للسّوريين. كما لا يمكن للّاجئين السّوريين الإستفادة من مشروع برنامج الرعاية الصحية الشاملة الذي بدأته وزارة الصحة العامة (*MOPH*، 2015) مما يؤكّد على أهمية توسيع المشروع أو إعداد مبادرة مماثلة تشمل اللّاجئين السّوريين. ويفتقد لبنان أيضاً إلى نظام فعّال للإحالة الطبية، خاصةً فيما يتعلق باللّاجئين السّوريين، وهذا النقص يشكّل عائقاً رئيسياً دون تحسين نتائج الرعاية الصحية للأم والطفل (المتعلقة بالولادة) ومعدلات المراضة والوفيات (*El Kak & Ammar*، 2016).

على **المستوى المالي/ المادي**، وبالرغم من أنّ المفوضية السامية لشؤون اللّاجئين في الأمم المتحدة قد رفعت من معدّل مساهمتها في فواتير استشفاء اللّاجئين (*Blanchet et al.*، 2016) إلّا أنها تغطّي 90% من التكاليف المتعلّقة بالعناية الفائقة للمواليد الخدّج وحديثي الولادة من الحالات الأكثر عوزاً (*severely vulnerable*) منذ نيسان 2016. وبالرغم من الإعانات التي تقدمّها المفوضية ووزارة الصحة العامة لتغطية خدمات الرعاية الصحية الأولية، تبقى التكلفة العائق الأكبر دون الحصول على الرعاية ما قبل الولادة اللائقة والمطلوبة للحمل والولادة والمواليد الخدّج (*Kabakian-Khasholian، Mourtada، Bashour، El Kak، Zurayk &*، يصدر قريباً).

أما على **مستوى تقديم الخدمات**، هناك نقص في عدد مقدّمي خدمات الرعاية الصحية المتخصصين في شؤون اللّاجئين واحتياجاتهم الصحية، وهذا يؤثر سلباً على جودة الرعاية التي تقدمها مراكز الرعاية الصحية في هذا المجال (*Benage et al.*، 2015). وأيضاً، وبالرغم من جهود صندوق الأمم المتحدة للسكان لتدريب أفراد من المجتمعات المحلية على الرعاية الصحية والولادة (تدريب القابلات)، لا تزال هناك حاجة إلى مزيد من الأخصائيين في المجال الصحي وكذلك إلى التوعية في أوساط اللّاجئين.

إنّ محدودية القدرة على الوصول إلى الرعاية الصحية المطلوبة خلال الحمل والولادة وما بعد الولادة تشكل عائقاً أساسياً دون القدرة على الوقاية الممكنة والإشراف المطلوب فيما يخصّ الولادات المبكرة في أوساط اللّاجئين السّوريين. وسجلت معدّلات الوصول إلى خدمات الرعاية الصحية خلال الحمل والولادة تراجعاً في أوساط اللّاجئين السّوريين في العام 2016 مقارنة بالعام 2015 (*UNHCR*، 2016) حيث لم يحصل سوى 53% من اللّاجئات السّوريات على خدمات الرعاية الصحية المتعلقة بالحمل خلال أشهر الحمل الثلاث الأولى. وتتمثّل أبرز العوامل التي تحول دون الحصول على هذه الرعاية الصحية في: التكلفة، قلّة الوعي بأهمية الرعاية وعدم الثقة بجودتها وبمستوى الخدمات.

وفي السياق نفسه، فإنّ معدّلات الحصول على الرعاية الصحية ما بعد الولادة منخفضة بشكل ملحوظ في أوساط اللّاجئين السّوريين، بنسبة 26% فقط من اللّاجئين السّوريين المسجلين، ويعود هذا بشكل رئيسي إلى عدم معرفتهم بتوفّر هذه الخدمات (*UNHCR*، 2016).

وعلى **المستوى الطبي**، نشير إلى عدد من العوامل التي تساهم في زيادة مخاطر واحتمالات الولادات المبكرة في أوساط اللّاجئين السّوريين، مثل، ضغط الدم، والسكري (*UNHCR*، 2016) والخضوع سابقاً إلى ولادة قيصرية (*UNHCR*، *2015a*).

وعلى **المستوى الإجتماعي والإقتصادي**، فإن الأحداث السياسية الأخيرة في سوريا أدّت إلى تدهور كبير وانقطاع عن متابعة الرعاية الصحية لدى الأمهات، ما جعلهنّ أكثر عرضة للمضاعفات الصحية ولمخاطر الحمل (أي الولادة المبكرة) مما أدّى أيضاً إلى ارتفاع معدلات الوفيات والمراضة لدى الأمهات والمواليد (*Benage et al.*، 2015؛ *El Kak & Ammar*، 2016) في أوساط اللّاجئين السّوريين. كما ترتبط الولادة المبكرة لدى اللاجئات السوريات بعوامل أخرى مثل تعرّضهم للعنف الجنسي، والفقر، وافتقاد الأمن والأمان، وغياب النظافة، وقلة التغذية (*Büyüktiryaki et al.*، 2015؛ *Benage et al.*، 2015؛ *Masterson et al.*، 2014؛

Hetherington et al.، 2015؛ *Agrawal & Hirsch*، 2012). وتساهم الظروف الإجتماعية والإقتصادية الصعبة للّاجئين السّوريين في ازدياد حالات زواج الفتيات في عمر مبكر. وهذا بدوره يزيد من احتمالات حدوث مضاعفات خلال الحمل، واحتمالات ولادة أطفال خدّج بوزن منخفض، والولادة المبكرة، وعدم الحصول على الرعاية الصحية المطلوبة خلال الحمل والولادة (*Benage et al.*، 2015؛ *Eshghizadeh et al.*، 2015؛ *Serhan & Anini*، 2015؛ *Abu Hamad et al.*، 2007). كما أنّ للعادات والتقاليد دور رئيسي في التخطيط الأسري (*Kabakian-Khasholian et al.*، يصدر قريباً)؛ فمثلاً، لا تتجاوز نسبة من يستخدمون موانع الحمل 45% من اللّاجئين (*Benage et al.*، 2015) وهذا يعود بشكل رئيسي إلى التقاليد والممارسات المجتمعية السائدة (*Kabakian-Khasholian et al.K*، يصدر قريباً).

العناصر المطلوبة لمعالجة المشكلة بشكل شامل

تشكّل العناصر الأربعة التالية بمجموعها مقاربة متكاملة للحدّ من مشكلة الولادات المبكرة في أوساط اللاجئات السوريات، ويمكن اعتماد أيّةً منها بصورة مستقلة أو اعتمادها جميعاً لتكمّل بعضها بعضاً.

العنصر الأول> تعزيز قدرة النساء على الوصول إلى الرعاية الصحية المطلوبة خلال الحمل وما بعد الولادة

إنّ قدرة المرأة على الوصول إلى الرعاية الصحية المطلوبة خلال الحمل والولادة وما بعد الولادة هو أمر ضروري لصحة الأم والمولود (*Mrisho et al.*، 2009؛ *Bhutta, Ali, Cousens & Ali*، 2008). فالكشف المبكر والرعاية الصحية خلال الفترة الأولى من الحمل تمكّن من اكتشاف أي مضاعفات أو مخاطر، واتخاذ الإجراءات اللازمة قبل الولادة بحيث يتمّ ترتيب الولادة في بيئة توفر مستوى الرعاية الصحية المطلوبة، ويتمثل الهدف الرئيسي من هذه الإجراءات في تحسين نتائج الحمل(على صعيد صحة الأم والطفل) إلى أقصى حدّ ممكن (*Mathole, Lindmark, Majoko, & Ahlberg*، 2004). وتعتبر خدمات الرعاية الصحية ما بعد الولادة ضرورية ويجب أن يتمّ تقديمها بصورة روتينية (*Mrisho et al.*، 2009).

وتشكل الأمور المالية عائقاً رئيسياً دون الحصول على الرعاية الصحية المطلوبة فيما يتعلق بالحمل والولادة، خاصة لدى اللّاجئين السّوريين (*Malqvist, Yuan, Trygg, Selling & Thomsen*، 2013؛ *Lewin et al.*، 2008؛ *Kiwanuka et al.*، 2008؛ *Downe, Finlayson, Walsh & Lavender*، 2009). عليه، فإن الحوافز المالية (مثل التحويلات المالية المشروطة، والقسائم، والإعفاء من بعض رسوم

استخدام الخدمات الصحية) وخدمات التأمين الصحي هي من الاستراتيجيات الفعالة في تحسين القدرة على الوصول إلى خدمات الرعاية الصحية.

العنصر الثاني> تحسين جودة خدمات الرعاية التي تقدمها المراكز الصحية من خلال برامج الإعتماد لخدمات الرعاية الصحية الأولية ومن خلال اعتماد المبادئ التوجيهية المبنية على البراهين العلمية

برامج اعتماد الرعاية الصحية الأولية

تعتبر برامج الإعتماد من الاستراتيجيات التي يتم استخدامها بصورة متزايدة لتحسين الرعاية الصحية الأولية المقدمة في لبنان، وهذه الاستراتيجية بصورة عامة هي من أكثر الوسائل فعالية لقياس وتقييم أداء مؤسسات الرعاية الصحية (*Jovanovic*، 2005) وقد أثبتت العديد من الدراسات فعالية هذا الأسلوب خاصة في تحسين إنتاجية المؤسّسات، ودعم أطر الأخلاقيات المهنية، وتحسين جودة الرعاية الصحية وسلامة المرضى، ورفع معدلات رضى المرضى والرضى الوظيفي في أوساط مقدمي خدمات الرعاية.

المبادئ التوجيهية المبنية على البراهين والأدلّة العلمية الموثّقة

تشهد أوساط الرعاية الصحية اهتماماً متزايداً بالمبادئ التوجيهية المبنية على البراهين والأدلّة العلمية الموثّقة، والتي تسعى بصورة رئيسية إلى تحسين فعاليّة الرعاية (*Bahtsevani, Udén, Willman, Blekinge Tekniska, & Sektionen för*، 2004) وضمان مستويات أعلى من جودة الرعاية المقدمة نتيجة ما تؤدي إليه من تحسين على مستوى مهارات مقدمي خدمات الرعاية ومعرفتهم وسلوكياتهم (*Bahtsevani et al.*، 2004؛ *Dizon, Grimmer-Somers, & Kumar*، 2012؛ *Flodgren, Rojas-Reyes, Cole, & Foxcroft*، 2012؛ *Flores-Mateo & Argimon*، 2007؛ *Lugtenberg, Burgers, & Westert*، 2009؛ *Menon, Korner-Bitensky, Kastner, McKibbon, & Straus*، 2009؛ *Scurlock-Evans, Upton, & Upton*، 2014؛ *Ubbink, Guyatt, & Vermeulen*، 2013).

العنصر الثالث> اعتماد مبدأ تحويل المهام في مراكز الرعاية الصحية الأولية للأم والطفل

يشير مصطلح تحويل المهام (*Task-Shifting*) في الرعاية الصحية إلى تكليف أفراد ضمن كادر الرعاية بمسؤوليات كانت سابقاً من اختصاص رتب وظيفية أعلى وذلك لأنّهم يمتلكون الكفاءة والقدرة على القيام بها على أكمل وجه (*Laurant*

et al.، 2005). وأظهرت الدراسات أنّ تحويل المهام يساهم في زيادة الوصول إلى الرعاية الصحية، ويساهم في تحسين جودة الرعاية، وفي الحدّ من الولادات المبكرة (*Turienzo et al.*، 2016؛ *Sandall et al.*، 2016؛ *Lassi & Buhta*، 2015؛ *Lewin et al.*، 2008؛ *Laurant et al.*، 2005؛ *Horrocks et al.*، 2002؛ *Martinez-Gonzalez et al.*، 2014).

كما وتشير التجارب إلى أنّ الرعاية التي يشرف ممرض(ة) على إدارتها وتقديمها قد تؤدي إلى رعاية ذات جودة أفضل (*Horrocks et al.*، 2002؛ *Laurant et al.*، 2005) وتحسّن من معدلات الرضى لدى المرضى، وتحدّ من معدلات الاستشفاء والوفيات في أوساط الأمهات والمواليد الجدد الخدّج (*Martinez-Gonzalez et al.*، 2014). كما أنّ تدريب قابلة قانونية في كل قرية وتكليفها بمسؤوليات معينة خلال الحمل والولادة وما بعد الولادة يساهم في إبقاء الأم والطفل في دائرة الرعاية المتخصصة (*Yuan et al.*، 2014).

العنصر الرابع> تحسين التّدخلات المتعلقة بالتوعية والتخطيط الأسري والرعاية المتعلقة بالحمل والولادة

إنّ مشاركة المجتمع هي عنصر ضروري لإنجاح التدخلات الصحية وخاصة فيما يتعلق بصحة الحمل والولادة والأطفال الخدّج (*Lassi*، 2010). وتفتقر أوساط اللّاجئين السّوريين إلى التدخلات المجتمعية (*Community-Based Interventions*) في مجال التخطيط الأسري وصحة الحمل والولادة، وإلى التركيز على أهمية المباعدة بين الولادات، خاصّة وأنّ هذه التدخلات يمكن أن تساهم بشكل ملحوظ في الحد من مخاطر ومضاعفات الحمل (أي الولادة المبكرة) وفي تحسين صحة الأم والطفل/المولود (*Wilcher*، 2010). ومن العوامل المهمة في هذا السياق، مشاركة أفراد من المجتمع المحلي المعني بالتدخلات وبناء علاقات متينة مع المنظمات المحلية غير الحكومية، بهدف تحسين نتائج وفعالية التدخلات.

ما هي العوامل التي يجب أخذها بعين الاعتبار عند التطبيق العملي؟

نشير فيما يلي إلى أبرز الإعتبارات المطلوبة على مستوى المرضى، والمتخصصين الصحيين، والمؤسسات الصحية، والنظام الصحي:

- ← زيادة الوعي والتثقيف بخصوص أهمية الرعاية الصحية في مراحل الحمل والولادة وما بعد الولادة، وأهمية التخطيط الأسري، بأسلوب يؤثر إيجاباً

في رفع زيادة معدلات اهتمام النساء بالمتابعة الطبية خلال الحمل والولادة، والتخطيط الأسري (أي استخدام وسائل منع الحمل).

- ← دعم تكاليف الرعاية الصحية واعتماد نماذج تشجّع على استخدام وسائل منع الحمل.
- ← تدريب العاملين في الرعاية الصحية على تقديم الخدمات المتخصّصة لرعاية النساء الحوامل والأمهات والمواليد.
- ← وضع تشريعات لجميع المتخصصين في الرعاية الصحية، للحماية من أي ممارسة غير عادلة أو غير أخلاقية، وللحدّ من النزاعات في إطار التشريعات والتراخيص الصحية المعتمدة حالياً.
- ← مشاركة المجتمع المحلي لتسهيل تنفيذ التدخلات المجتمعية وتحقيق أهدافها.
- ← إعداد مبادئ توجيهية مبنية على البراهين العلمية لكن بأسلوب مبسّط وواضح، يدعم القدرة على الالتزام بها وتطبيقها.
- ← تطوير قدرات كوادر مراكز الرعاية الصحية الأولية في لبنان، وهذا يجب أن يتمّ بالتزامن مع تطبيق برامج الاعتماد.
- ← تقديم الدعم والمساعدات المالية والرصد والإشراف من السلطات المعنية مثل وزارة الصحة العامة في لبنان، وذلك لدعم تطبيق برامج الاعتماد لمراكز ومؤسسات الرعاية الصحية الأولية.
- ← إيجاد سياسات عامة وإجراءات ومبادئ توجيهية واضحة تكون بمثابة أساس لبرامج الاعتماد قبل البدء بتطبيق هذه البرامج.

Content

K2P Policy Brief- Full report

The Problem

Preterm deliveries are associated with high newborn morbidity and mortality rates among Syrian refugees. Children under one year of age constitute the majority of mortalities among Syrian refugees in Lebanon (61%), with preterm deliveries being the highest contributor to those deaths (26%).

Size of the Problem

Preterm delivery has been identified as a global problem associated with high newborn morbidity and mortality rates (Beck et al., 2010). Preterm birth complications are the number one direct cause of death among children under 5 years of age, leading to nearly 1 million newborn deaths per year (WHO, 2016). Worldwide, the preterm rate has significantly increased from an estimated 12.5 million in 2005 (Beck et al., 2010) to 15 million in 2015 (WHO, 2016).

Premature babies are at higher risk of intrapartum complications such as birth asphyxia and neonatal infections (UNHCR, 2012; Blencowe et al., 2013). Also, children born preterm may have neurologic deficits, visual, hearing and learning impairments, and chronic lung and cardiovascular disease. The long-term consequences of prematurity require prolonged care and result in a high burden on the health care system and the family of the child (Beck et al., 2010; Petrou et al., 2001; Blencowe et al., 2013). However, more than three-quarters of premature babies can be saved with feasible, cost-effective care, such as essential care during childbirth and in the postnatal period for every mother and baby (WHO, 2016).

In Lebanon, between 2001 and 2007, premature births were estimated to be 8.3%, with the majority (73.5%) born in the late preterm phase (34-36 weeks) (Younis, 2007). Moreover, a cohort study released in 2014 and conducted over a period of 3 years in one health care facility, found that 11.4% of births are preterm (Nawfal et al., 2014). According to the 2015 Ministry of Public Health national report, the number of births occurring in

Background to Policy Brief

A K2P Policy Brief brings together global research evidence, local evidence and context-specific knowledge to inform deliberations about health policies and programs. It is prepared by synthesizing and contextualizing the best available evidence about the problem and viable solutions and options through the involvement of content experts, policymakers and stakeholders.

The preparation of the Policy Brief involved the following steps:

1) *Selecting a priority topic according to K2P criteria*
2) *Selecting a working team who deliberates to develop an outline for the policy brief and oversee the litmus testing phase.*
3) *Developing and refining the outline, particularly the framing of the problem and the viable elements*
4) *Litmus testing by conducting one to one interviews with up to 15 selected policymakers and stakeholders to frame the problem and make sure all aspects are addressed.*
5) *Identifying, appraising and synthesizing relevant research evidence about the problem, elements, and implementation considerations*
6) *Drafting the brief in such a way as to present concisely and in accessible language the global and local research evidence.*
7) *Undergoing merit review*
8) *Finalizing the Policy Brief based on the input of merit reviewers, translating into Arabic, validating translation, and disseminating through policy dialogues and other mechanisms.*

Lebanon is 69,948 for Lebanese and 39,269 for non-Lebanese and contributed by the high number of Syrian refugees (Assafir, 2016). With a rough estimate of 42 000-50 000 pregnant Syrian refugees over mid 2013-2014 and a compromised unregulated system of health financing and antenatal coverage, it's expected that the risk of maternal morbidity and mortality might be higher. (El Kak & Ammar, 2016)

In 2015, 61% of refugee mortalities in Lebanon were children under one year of age (UNHCR, 2015a), of which 75% were in the perinatal period (IAWG, 2012).

According to the United Nations World Food Program (WFP), the United Nations Children's Fund (UNICEF) and the United Nations High Commissioner for Refugees UNHCR (2015), one in five of Syrian refugees' households in Lebanon have at least one pregnant or lactating woman. Also, based on a UNCHR household survey of 2,206 Syrian refugees in 2016, 16.2% of newborns were admitted to the hospital for special care, which includes prematurity, for an average of 10 days. The median cost of neonate admission was 408$ USD and 25% of the sample were not able to afford hospital fees (UNHCR, 2016). This, in turn, places pressure on the Lebanese health care system, which is faced with the challenges of providing health care access to a rapidly increasing population (by 30%) as a result of the massive influx of refugees.

Despite the absence of data on the prevalence of preterm births among Syrian refugees, the available data indicate that preterm deliveries are the highest contributor to deaths in children under one year of age (26%) (UNHCR, 2015a). This places Lebanon in a critical state when it comes to achieving the third sustainable development goal. In addition, the current high percentage of households with pregnant or lactating women as well as the burden of preterm deliveries on the child, family and healthcare system highlight the urgent need to improve access to and quality of services for the prevention and management of preterm deliveries among Syrian refugees in Lebanon.

Underlying Factors

The following section focuses on the underlying factors at the governance, financial and delivery arrangement levels of the health system, in addition to medical and sociopolitical factors that may have contributed to the problem.

Governance

UNHCR's mandate is to provide protection and basic assistance including supporting access to healthcare services for Syrian refugees in Lebanon. Assistance provided to Syrian refugees in Lebanon is based on a primary health care (PHC) strategy wherein primary health care services are

subsidized by Non-Governmental Organizations (NGOs) in approximately 100 existing health centers across the country and access to secondary and tertiary services are managed by a third-party private administrator contracted by UNHCR (Lyles et al. 2016).

To improve access to PHC, the MOPH launched in January 2016 the "Comprehensive Primary Health Care (PHC) Project, a Step toward Universal Health Coverage" initiative, which will provide 150,000 Lebanese citizens with free PHC services in 75 PHC centers (PHCCs). The services consist of six different packages, including antenatal care (ANC) and child care (MOPH, 2015). However, this package only covers Lebanese women and Syrian refugees cannot benefit from it. Although this package has not yet been evaluated, it offers an opportunity to scale up or develop a similar package to cover Syrian refugees. Moreover, Lebanon lacks a robust referral system, especially for Syrian refugees, which was a major barrier to improving the maternal health outcomes and reducing maternal morbidity and mortality rates (El Kak & Ammar, 2016).

Financing

At the onset of the crisis, UNHCR supported access to health care for refugees within the existing health system in Lebanon. In 2013 and due to the increase in the number of refugees and healthcare costs for UNHCR in Lebanon, UNHCR increased the refugees' contribution to hospital bills 15% to approximately 25% (Blanchet et al., 2016). However, for refugees who are assessed as severely vulnerable and those admitted for neonatal intensive care, UNHCR covers 90% of the costs since April 2016 with a maximum contribution of 13500 USD. UNHCR only covers neonates above 26 weeks of gestation. Syrian refugees' household expenditure on health care is high and increasing; coupled with increasing levels of poverty, costs have been identified as the main barrier to accessing health care (UNHCR, 2015b). On average, households contributed 66$ USD for UNHCR-supported normal delivery and 283$ USD for UNHCR-supported Cesarean section (C-section), both higher than the agreed upon patient share for deliveries (UNHCR, 2016). UNHCR contributes 250$ USD for normal delivery and 500$ USD for C-sections (UNHCR, 2015b). It is essential to note that 57% of the UNHCR's accepted referrals are pregnancy related, with 90% of them related to delivery. In total, 40% of UNHCR's expenditure was spent on maternal care (UNHCR, 2015).

The UNHCR provides financial support for ANC for Syrian refugees. For registered pregnant Syrian refugees, the UNCHR program covers most of the fee for 4 ANC visits in UNHCR supported PHCCs which includes a subsidy of 85% of laboratory costs, and 75% of delivery costs and supplements and two ultrasounds free of change. In addition, arrangements were made with MOPH

to provide Syrian refugees with PHC consultations at a cost between 3,000 and 5,000 Lebanese Pounds (2 to 3.3$ USD); nonetheless, only 100 PHCCs are providing care for Syrian refugees (El-Jardali et al., 2016).

Despite subsidies for PHC services provided by the UNHCR and MOPH, cost for care remains the main barrier to accessing ANC since they do not cover transportation and medications, which add up to a total of 20$ USD-30$ USD per visit (Kabakian-Khasholian, Mourtada, Bashour, El Kak and Zurayk, forthcoming).

Also, UNHCR's 2016 Health access and utilization survey among Syrian refugees in Lebanon reported that among the 30% of pregnant women who did not receive ANC, most reported being unable to afford fees and/or transport costs (UNHCR, 2016).

Delivery

Lack of trained health care workers to address refugees' health issues has influenced the quality of care provided in healthcare centers. Among the Syrian refugees who had at least one antenatal visit, only 63.8% received care attended by a skilled professional three or more times, 31.9% 1 to 2 times, and 4.3% never received skilled ANC (Benage et al., 2015).

The UNFPA provided training of the trainers targeting midwives and health care workers on family planning counseling in humanitarian settings. It also conducted a series of training workshops on reproductive health and hygiene promotion within local and refugee communities to enable them to organize awareness sessions for approximately 5,400 women on reproductive health and hygiene promotion. Awareness campaigns reached out to 3,500 women with information on basic life skills including early marriage, gender-based violence, healthy nutrition, and reproductive health (UNFPA, 2015). The UNFPA distributed reproductive health supplies, such as reproductive health kits, to the Ministries of Public Health and Social Affairs and to local and international NGOs supporting PHCCs and hospitals. The distributed kits were expected to serve a total number of 3,495 women and girls and 4,150 adults including males (UNFPA, 2014). Despite the UNFPA's efforts, there is still need to train more health care workers and to further raise awareness among refugees.

Limited access to ANC is an important factor affecting the prevention and management of preterm deliveries among Syrian refugees. Access to ANC has decreased from 2015 to 2016, with barely 70% of female refugees receiving ANC in clinics, of which only 53% attended the recommended 4 or more visits in 2016, compared to 85% in 2015 (UNHCR, 2016). Rates were even lower among refugees who are not registered with UNCHR and those living closer to the borders with Syria (Benage et al., 2015). UNHCR estimates indicate that 27% of pregnant non-camp refugee women face

difficulties in accessing ANC (UNHCR, 2015b). Table 1 below lists frequently reported barriers to accessing ANC.

Box 1 **Barriers to accessing ANC**

61.4% claim it is too expensive (UNHCR, 2016)
15.9% report transport difficulties (UNHCR, 2016)
32.3% feel it is unnecessary (UNHCR, 2014a)
21.7% claimed that the facility declined to provide services (UNHCR, 2014a)
16.1% do not know where to go (UNHCR, 2014a)
Lack of female health care providers (Materson et al., 2014; UNHCR, 2015b; UNHCR, 2014a)
Tenuous living arrangements (Benage et al., 2015)

During the first trimester, only 53% of Syrian refugees attended ANC. Table 2 lists the barriers to accessing ANC in the first trimester.

Box 2 **Barriers to accessing ANC in the first trimester**

Financial barriers
Patient's mistrust in the quality of care provided (Perera and Masterson, 2016). Quality, type, and services of ANC provided differ among health facilities (Benage, 2015).
Not understanding the benefits of ANC in the first trimester because: ⇢ They cannot find out the gender of the baby ⇢ They were asked to return for an ultrasound on their 4th month of pregnancy since most ANC packages provide two free echocardiographs, as such the first echocardiography was postponed to the 4th month of pregnancy (Perera and Masterson, 2016).

Similarly, access to postnatal care is significantly low among Syrian refugees with only 26% registered Syrian refugees accessing postnatal care, mainly due to their lack of knowledge of the services' availability (UNHCR, 2016).

Medical

UNHCR's 2016 data shows that 8% of household members (386 households surveyed) were reported as having a chronic disease. The most common were hypertension (40%), diabetes (28%), asthma/COPD (22%), and heart disease (20%). Even though the sample may not be representative of the Syrian refugee population residing in Lebanon (due to the low overall response rate), the 2016 reported rates were considered notably higher in comparison to the UNHCR's 2013 data (580 households surveyed) that showed that 17.5% of Syrian refugees in Lebanon have diabetes and 18.8% have hypertension, with the highest number of affected population being among refugees at a reproductive age (18- 49 years) (UNHCR, 2013). Chronic diseases such as diabetes and hypertension were shown to be the main risk factor for medically indicated preterm deliveries (Sarhan & Anini, 2015).

One case-control study among Palestinian women showed that previous delivery by C-sections is a risk factor for preterm delivery (Serhan & Anini, 2015). A total of 34% of Syrian refugees admitted to Lebanese hospitals for delivery undergo C-sections (UNHCR, 2015a), which increases the financial burden on UNHCR and partners (UNHCR, 2014a).

In a 2010 study by DeJong et al. that gathered information on maternal health in Lebanon, data reported from hospitals across the country revealed a C-section rate of 40.8 percent, far above the World Health Organization's (WHO) recommended a rate of 15 percent. The current Syrian refugee C-sections rate in Lebanon is higher than the 23% rate reported in Syria (Huster et al., 2014). The high rate of C-sections among Syrian refugees in Lebanon may be due to physician or patient suitability of date and time of delivery (Serhan & Anini, 2015; Huster et al., 2014), personal insecurities such as giving birth at unpredictable times and insecure environments (Devakumar et al., 2015).

The average patient expenditure for a UNHCR-supported C-section was 304 USD and the median cost 283.3 USD which is higher than the agreed upon patient share of 150-200 USD that hospitals should be charging (UNHCR, 2016).

Sociopolitical

The health care system, among other aspects of the lives of the people, is being seriously affected by the most recent political turmoil. This situation has shown to have a grave interruption on maternal health and increased the vulnerability of pregnant women to medical complications and risks of pregnancies (i.e. prematurity, bleeding, etc.), increasing maternal morbidity and mortality (Benage et al., 2015; El Kak& Ammar, 2016).

Coming from a war-zone, Syrian female refugees of childbearing age are more likely to be victims of traumatic events, which along with the risk of sexual violence, poverty, and insecurity can play an important role in the access and delivery of ANC (Benage et al., 2015) and are significantly associated with preterm delivery (Büyüktiryaki et al., 2015; Benage et al., 2015; Masterson et al., 2014, Hetherington et al., 2015).

In 2015, the UNHCR reported that a total of 16.3% of refugees were living in substandard housing conditions (UNHCR, WFP& UNICEF, 2015) with the majority of refugees living in the poorest regions of the Bekaa and North Lebanon (Blanchet, 2016). A total of 31.9% of women lacked access to basic hygiene resources such as drinking water, female hygiene products, bathing amenities, soap and water (Masterson et al. 2014). Inadequate hygiene for women puts females at risk of intrauterine infections, which in turn is significantly associated with preterm births (Agrawal and Hirsch, 2012).

Living in an inadequate shelter was also found to be significantly associated with decreased dietary and iron intake (Benage et al., 2015). Poor dietary and iron consumption can contribute to an increase in anemia or menstrual irregularity, leading to preterm births (Masterson et al., 2014). In fact, a recent study showed that 59% of pregnant Syrian refugees took iron supplements during pregnancy and only 41% had an adequate diet that includes vitamins and folic acid (Benage et al., 2015). Another study reported an anemic rate of 27.4% among Syrian refugee women in Lebanon (Masterson, Usta, Gupta and Ettinger, 2014).

Preterm deliveries were also shown to be significantly associated with food security (Masterson et al., 2014), which has decreased from 32% in 2013 to 11% in 2015 (UNHCR, WFP& UNICEF, 2015). The decline in food security has rendered 89% of Syrian refugees as food insecure, with the most insecure households concentrated in Zahle, Baalbek, Akkar and West Bekaa (UNHCR, WFP& UNICEF, 2015). This has left 54% of Syrian refugees dependent on food assistance (WFP, 2015; UN, 2015), which in turn has decreased from 69% in 2014 to 67% in 2015 (UNHCR, WFP& UNICEF, 2015). The decline in food assistance, alongside limited access to income, and reliance on debt to cover food expenditure (300$ difference between the monthly expenditure on food and income) have aggravated food insecurity among Syrian refugees (WFP, 2015; UN, 2015).

There is also a striking increase in Syrian refugee households in Lebanon that are below poverty line, from 49% in 2014 to 70% in 2016, (USD 3.84/person/day), with 52% falling below the survival minimum expenditure basket, and 61% are applying emergency and crisis coping strategies (WFP & FAO, 2016).

To alleviate their household financial burden, refugee girls resort to getting married at an early age. An assessment of the situation of Syrian

refugee youth in Lebanon found that 18% of refugee women aged 15-18 are married (UNFPA, UNICEF, UNESCO, Save the children & UNHCR, 2015) and there are no legal or religious restraints to stop the act of early marriage. Young maternal age and low socioeconomic status are significantly associated with pregnancy complications, low birth weight, preterm labor, and inadequate ANC (Benage et al., 2015; Eshghizadeh et al., 2015; Serhan & Anini, 2015; Abu Hamad et al., 2007).

Furthermore, culture and perceptions play a crucial role in family planning. Large families have been part of the culture of most cities in Syria. One qualitative study showed that Syrian refugee women desired up to six children with at least one being male. Males have been perceived as the element of continuation of the family. According to Kabakian-Khasholian et al. (forthcoming), couples would try to have as many children until they give birth to a male. Others mentioned wanting many children to replace those that were lost during the war. A few females believe that children are good fortune in bad circumstances (Kabakian-Khasholian et al., forthcoming).

Almost 75% of female [14-42 years old] Syrian refugees wanted to prevent getting pregnant and more than half of the females mainly between 19 and 42 years old did not want their current pregnancy. However, less than 45% of them use contraceptives (Benage et al., 2015). Some female refugees fear their husbands would leave them for someone else if they refused to have children, and opted not to use family planning methods. Such attitudes reflect the dominant role of males in determining family planning (Kabakian-Khasholian et al., forthcoming). Therefore, family planning methods, although currently found and needed, should be tailored to overcome the barriers of their implementation among the Syrian refugees.

Elements of a policy approach to address the problem

The following four elements form part of a comprehensive approach to tackle the issue of preterm deliveries, and therefore can be adopted either independently or could complement one another.

Element 1› Strengthen accessibility to antenatal and postnatal care

Element 2› Improve the quality of services delivered in health care centers by accrediting primary health care centers and integrating evidence-based guidelines

Element 3› Integrate task shifting into antenatal care in primary health care centers

Element 4› Enhance outreach community-based interventions on family planning and antenatal care

Elements

Policy Elements and Implementation Considerations

Element 1

Strengthen accessibility to antenatal and postnatal care

Timely access to ANC and postnatal care (PNC) is critical for the health and survival of both the mother and the newborn (Mrisho et al., 2009; Bhutta, Ali, Cousens & Ali, 2008). ANC refers to all the medical services provided to women throughout her pregnancy in order to ensure that the pregnancy and childbirth will not have negative consequences on her health or her newborn's health (Berhan & Berhan, 2014). The postnatal period is defined by the WHO as the period beginning one hour after the delivery of the placenta and continuing until six weeks (42 days) after the birth of an infant (Mrisho et al., 2009).

During the antenatal period, ANC visits and services aim to prevent, alleviate, treat or manage health problems, including those directly related to the pregnancy. These services provide appropriate information and advice for healthy pregnancy, childbirth, and postnatal outcomes; this includes newborn care, breastfeeding promotion and healthy timing and spacing of subsequent pregnancies (WHO, 1998; Mrisho et al., 2009).

The use of ANC early in the pregnancy is considered important to ensure that risks are detected, appropriate ANC is arranged and women are registered or 'booked' for delivery at the appropriate level of care, mainly in order to improve pregnancy outcome (Mathole, Lindmark, Majoko, & Ahlberg, 2004).

Postnatal services are perceived to be both important and routinely provided; unless there is a serious issue related to maternal complications, these services target the child, and little attention is paid to the mother (Mrisho et al., 2009).

Five systematic reviews and one overview of reviews found that strengthening accessibility to ANC and PNC had a positive impact on pregnancy outcome (Berhan & Berhan 2014; Simkhada, Teijlingen, Porter & Simkhada, 2008; Malqvist et al., 2013; Lewin et al., 2008; Yuan, Målqvist, Trygg, Qian, Ng & Thomsen, 2014).

Two systematic reviews mentioned that ANC may increase the awareness of pregnant women and their families to potential danger symptoms and potential obstetric complications (Berhan & Berhan 2014; Simkhada et al., 2008). Additionally, ANC creates an informal forum for the sharing of

SUMMARY

Element 1
Strengthen accessibility to antenatal and postnatal care

Element 2
Improve the quality of services delivered in health care centers by accrediting primary health care centers and integrating evidence based guidelines

Element 3
Integrate task shifting into antenatal care in primary health care centers

Element 4
Enhance outreach community-based interventions on family planning and antenatal care

information among pregnant women attending ANC in the same facility (Berhan & Berhan 2014; Simkhada et al., 2008). This may provide women with an opportunity to learn from each other's experiences especially from those who experienced a high-risk pregnancy (Berhan & Berhan 2014; Simkhada et al., 2008).

According to two high-quality primary studies, routine access and frequent visits to ANC leads to an early detection of serious pregnancy complications, resulting in prompt treatment which may affect the outcome of the pregnancy (Dowswell et al., 2010; Mathole et al., 2004).

A secondary analysis of the WHO Antenatal Care Trial found that additional antenatal visits may serve to reinforce maternal education and compliance to medication, or provide an opportunity for screening and treatment of a condition that has been missed, omitted or deteriorated since the previous visit (Vogel et al., 2013).

A well-documented socio-demographic data indicate that women from relatively poor backgrounds, living in rural areas, and/or with low levels of education are less likely to access antenatal services (Finlayson & Downe, 2013).

Financial constraints in addition to distance to health care facilities and lack of appropriate and safe transportation were considered as major barriers to ANC accessibility especially among Syrian refugees (Malqvist, Yuan, Trygg, Selling & Thomsen, 2013; Lewin et al., 2008; Kiwanuka et al., 2008; Downe, Finlayson,Walsh & Lavender, 2009). Two systematic reviews and one overview of systematic reviews showed that financial incentives to attain primary health care services could have a positive impact on accessing health care (Malqvist et al., 2013; Lewin et al., 2008; Kiwanuka et al., 2008). Their intended impact is to encourage utilization of services in order to improve pregnancy outcomes, particularly amongst the poor (Jehan, Sidney, Smith & De Costa, 2012). Financial incentives such as, conditional cash transfers, voucher schemes and removal of user fees may lead to an increase in the access to health care services (Lewin et al., 2008; Malqvist et al., 2013; Kiwanuka et al., 2008; Jehan et al.,2012; Morris, Flores, Olinto & Medina, 2004; Sosa-Rubi, Walker, Servan & Bautista-Arredondo, 2011; Ahmed & Khan, 2011; Nguyen et al., 2012a).

Two systematic reviews and three high-quality studies showed that voucher programs for perinatal care to provide free access to ANC, delivery and postnatal care was associated with a significant increase in accessing ANC and delivery services. This increase was also evident among poor communities. Moreover, voucher programs implemented in Pakistan targeting only the poor provided vouchers that usually cost 50$ for 1$ and showed a positive impact on ANC and delivery service access. Another high-quality study was conducted in Honduras where monetary vouchers were awarded to women who remained

up-to-date with their routine antenatal and postnatal health services (Malqvist et al., 2013). The study reported an increase in ANC attendance by 20 percentage points in the catchment area (Morris et al., 2004).

Also, two high-quality studies evaluated a voucher program in Bangladesh where all pregnant women in the study area were identified and given a set of vouchers that would render them ANC, delivery, and postnatal care services for free (Ahmed & Khan, 2011; Nguyen et al., 2012a). The studies showed a significant increase in the overall use of antenatal and delivery care services (Nguyen et al., 2012a) and a stronger demand-increasing effect among the poor (Ahmed & Khan, 2011).

Cash-transfers, whereby families complying with health care plans (including ANC) were provided with cash rewards, was associated with long-term positive effects and higher ANC visits (Malqvist et al., 2013; Ekirapa-Kiracho et al., 2011; Bellows, Bellows & Warren, 2011; Bhatia & Gorter, 2007; Yuan et al., 2014; Morris et al., 2004; Sosa-Rubi at al.,2011). A high-quality study evaluated the long-term effects of a cash transfer program in Mexico. The program transferred money directly to beneficiary families that complied with the health care plan, including mandatory ANC visits in pregnancy and reproductive health talks. This study reported on a long-term effect of the program with longer exposure being associated with more ANC visits and a higher likelihood to choose a physician or nurse over a traditional midwife at delivery (Malqvist et al., 2013; Sosa-Rubi et al., 2011).

Although financial incentives may have a positive effect on the utilization of ANC, the total removal of user fees may lead to negative consequences such as increasing the demand for unnecessary services (Lewin et al., 2008; Malqvist et al., 2013; Kiwanuka et al., 2008; Jehan et al., 2012). Another reported concern was the possibility of misuse of funds where schemes involve financial incentives (Jehan et al., 2012).

Lastly, two high-quality studies mentioned that increased utilization of ANC without improved quality of care cannot lead to reduced maternal or neonatal mortality (Hofmeyr et al., 2009; Ekirapa-Kiracho et al., 2011).

Table 1 **Key findings from systematic reviews and single studies**

Category of finding	Element 1
Benefits	5 systematic reviews and one overview of reviews reported that strengthening accessibility to antenatal and postnatal care was found to have a positive impact on pregnancy outcome (Berhan & Berhan, 2014; Simkhada et al., 2008; Malqvist et al., 2013; Lewin et al., 2008; Yuan, Målqvist, Trygg, Qian, Ng & Thomsen, 2014).
	2 systematic reviews found that ANC may increase the awareness of pregnant women and their families to potential

Category of finding	Element 1
	danger symptoms and potential obstetric complications (Berhan & Berhan 2014; Simkhada et al., 2008). 1 systematic review mentioned that ANC creates an informal forum to discuss and share information among pregnant women attending ANC in the same facility; which may give them an opportunity to hear stories about other pregnant women's experiences especially those having a high-risk pregnancy (Berhan & Berhan 2014). 2 high-quality studies stated that routine access and frequent visits to ANC lead to an early detection of serious pregnancy complications, resulting in prompt treatment which may affect the outcome of the pregnancy (Dowswell et al., 2010; Mathole et al., 2004). 1 high-quality study stated that the use of ANC early in the pregnancy is considered important to ensure that risks are detected, appropriate ANC is arranged and women are registered and booked for delivery, which leads to improving pregnancy outcome (Mathole et al., 2004). 1 secondary analysis of the WHO Antenatal Care Trial found that additional antenatal visits may serve to reinforce maternal education and provide an opportunity for screening and treatment of a condition that had been missed, omitted or deteriorated since the previous visit (Vogel et al., 2013). 2 systematic review and 1 overview of systematic reviews found financial incentives are effective strategies to improve access to health care services (Malqvist et al., 2013; Lewin et al., 2008; Kiwanuka et al., 2008). 1 systematic review and 1 high-quality study mentioned that health insurance and conditional cash transfer can reduce the economic barrier to health care accessibility (Yuan et al., 2014; Sosa-Rubi at al.,2011) 1 review of evidence and 1 high-quality study mentioned that transportation and financial related barriers can be reduced through funding programs for the poor which can reduce health care accessibility (Ekirapa-Kiracho et al., 2011; Starfield & Shi, 2004). 1 systematic review and 5 high quality studies found that the use of vouchers lead to significant increases in postnatal care attendance and accessibility (Ekirapa-Kiracho et al., 2011; Bellows et al., 2011; Bhatia & Gorter, 2007; Morris et al., 2004; Ahmed & Khan, 2011; Nguyen et al., 2012a)

Category of finding	Element 1
Potential harms	The total removal of user fees may lead to negative consequences such as increasing the demand for unnecessary services (Lewin et al., 2008; Malqvist et al., 2013; Kiwanuka et al., 2008; Jehan et al., 2012). There is a possibility of misuse of funds where schemes involve financial incentives (Jehan et al., 2012).
Cost and/ or cost effectiveness in relation to the status quo	1 high-quality study reported ANC to be cost effective when women frequently attended visits (Magadi, Madise, & Rodrigues, 2000).
Uncertainty regarding benefits and potential harms (so monitoring and evaluation could be warranted if the approach element were pursued)	1 quasi-experimental study reported that despite the increased utilization of ANC and PNC, the quality of care provided at health facilities could not be guaranteed (Ekirapa-Kiracho et al., 2011). 1 quasi-experimental study and a high-quality study mentioned that increased utilization of ANC without improved quality of care cannot lead to reduced maternal or neonatal mortality (Hofmeyr et al., 2009; Ekirapa-Kiracho et al., 2011).

Element 2

Improve the quality of services delivered in health care centers by accrediting primary health care centers and integrating evidence-based guidelines

Primary health care accreditation

Efficient and high-quality primary health care services lead to reduced health care costs and inequalities and improved health outcomes (El-Jardali et al., 2014b). However, the quality of care provided in PHCCs in Lebanon varies among different centers (Yehia and El-Jardali, 2014; Benage, 2015) this may have contributed to the Syrian refugees' distrust in the care provided in PHCCs. Increasing ANC and PNC utilization without improving the quality of care at facilities, would not necessarily translate to improved maternal and neonatal mortality and morbidity and pregnancy outcomes (Hofmeyr et al., 2009; Ekirapa-Kiracho et al., 2011). One increasingly employed method to improve the care provided in current PHCCs in Lebanon is through accreditation, which has been reported to be among the most effective means to measure health care organization performance (Jovanovic, 2005).

In Lebanon, PHC accreditation was initiated by the Ministry of Public Health in 2008, in collaboration with Accreditation Canada

International. The first survey was conducted in 2012 and showed that many PHCCs lagged in quality regulations. In response, an accreditation system that follows a standard based approach was developed and implemented. In 2015, 78 PHCCs have undergone a mock survey and 10 PHCCs underwent the actual accreditation survey (MOPH, 2016).

The effectiveness of accreditation has been portrayed in various studies. One systematic review and one literature review showed that health care accreditation improves organization productivity (Greenfield, Pawsey, Hinchcliff, Moldovan, & Braithwaite, 2012; Nicklin, 2015). Moreover, two systematic reviews, two literature reviews and one primary study from Lebanon found evidence that healthcare accreditation promotes change, professional development, team involvement and staff circumstances (Chuang & Inder, 2009; Greenfield & Braithwaite, 2008; Greenfield et al., 2012; Nicklin, 2015; El-Jardali et al., 2014). Also, one systematic review and one literature review found consistent evidence to support a positive impact of accreditation on clinical outcomes, quality of care and nursing care especially in the management of trauma, ambulatory surgical care, infection control and pain management (Alkhenizan & Shaw, 2011; Chuang & Inder, 2009), this is crucial for the prevention and management of medical risk factors of preterm deliveries. Twelve high quality primary studies and one literature review reported that accreditation systems ensure the integration of a patient safety culture and enhance quality of care (Al-Awa et al., 2012; Chuang & Inder, 2009; Diab, 2015; Ho, Chang, Chiu, & Norris, 2014; Kohn, 2010; Kwon et al., 2013; Morris, 2012; Morton, Garg, & Nguyen, 2014; Nguyen et al., 2012b; Nicklin, 2015; Pomey, Contandriopoulos, François, & Bertrand, 2004; Schwengel et al., 2011; Shaw et al., 2014; Teng et al., 2012). Accreditation was reported to promote the use of ethical frameworks (Nicklin, 2015), improve perception of quality improvement among employees (El-Jardali, Jamal, Dimassi, Ammar, & Tchaghchaghian, 2008; Ghareeb, 2015) and increase patient and provider satisfaction rates (Al Tehewy, Salem, Habil, & Okda, 2009; El-Jardali et al., 2014b; Nicklin, 2015). Reported benefits of accreditation pertaining to PHCCs include improvement in documentation, implementation of standards, policies, and procedures, rules and regulations (El-Jardali et al., 2014b; Nicklin, 2015). On the other hand, three systematic reviews and one primary study reported inconclusive results with regards to the effectiveness of accreditation (Brubakk, Vist, Bukholm, Barach, & Tjomsland, 2015; Diab, 2015; Greenfield & Braithwaite, 2008; Greenfield et al., 2012). According to one systematic review and three studies, accreditation may generate higher costs on health care organizations as a result of the need to increase resources and build capacities (Greenfield & Braithwaite, 2008; Mihalik et al., 2003; Saleh et al., 2013). Thus, financial assistance from authorities such as the Ministry of Public Health (MOPH) is essential to support PHCCs in the

implementation of accreditation (El-Jardali, Ammar, Hemadeh, Jamal, & Jaafar, 2013). Moreover, in order to ensure sustainable implementation of accreditation, it is crucial to educate health care professionals on the importance of accreditation on potentially improving (Alkhenizan & Shaw, 2012), build capacity of staff working in PHCCs in parallel to the implementation of accreditation programs (El-Jardali et al., 2013) and delineate a body which will constantly monitor the implementation of accreditation standards at PHCCs (El-Jardali et al., 2013). Finally, the development of clear policies, procedures, and guidelines (El-Jardali et al., 2013) may facilitate the implementation of PHC accreditation system.

Evidence-based guidelines

There is growing interest in evidence-based guidelines in the current health care field which mainly aims to improve the effectiveness of care (Bahtsevani, Udén, Willman, Blekinge Tekniska, & Sektionen för, 2004). Eight systematic reviews reported that evidence-based practices (i.e. guidelines) ensure higher quality of care as a result of significant improvement in skills, knowledge and attitude of providers (Bahtsevani et al., 2004; Dizon, Grimmer-Somers, & Kumar, 2012; Flodgren, Rojas-Reyes, Cole, & Foxcroft, 2012; Flores-Mateo & Argimon, 2007; Lugtenberg, Burgers, & Westert, 2009; Menon, Korner-Bitensky, Kastner, McKibbon, & Straus, 2009; Scurlock-Evans, Upton, & Upton, 2014; Ubbink, Guyatt, & Vermeulen, 2013). One systematic review and five high-quality studies found that implementing evidence-based practices reduces cost on health care organizations (Bahtsevani et al., 2004; Black, Balneaves, Garossino, Puyat, & Qian, 2016; Considine & McGillivray, 2010; De Pedro-Gómez et al., 2012; Fineout-Overholt, Melnyk, & Schultz, 2005; Peterson, Bynum, & Roe, 2008). Two systematic reviews showed positive effects of various clinical interventions on preterm births and preterm birth outcomes (Bhutta et al., 2014; Morris, Oliver, Malin, Khan, & Meads, 2013). One overview of 75 systematic reviews pointed out that there are various clinical interventions that reduce preterm labor which include the use of antiplatelet drugs in less than 16 weeks of pregnancy and progesterone therapy (Morris et al., 2013). One systematic review reported that the implementation of clinical interventions at all natal stages could avert 71% of neonatal deaths, 33% of stillbirths, and 54% of maternal deaths per year (Bhutta et al., 2014). Furthermore, antenatal syphilis screening combined with penicillin treatment and antiplatelet drugs for women at risk of developing pre-eclampsia can reduce preterm births by 64% and 8% respectively. Administering antenatal steroids, delaying cord clamping and performing massage therapy significantly reduced preterm birth complications (Bhutta et al., 2014).

However, the evidence-based practice was thought to decrease therapeutic autonomy and thus reduce motivation to implement it (Scurlock-Evans et al., 2014) and remains infrequently used in health care organizations (Scurlock-Evans et al., 2014; Ubbink et al., 2013). As such, in order to facilitate the implementation of evidence-based guidelines, there should be a reduction in the complexity of guideline recommendations; robust and active dissemination strategies that target practitioner's attitudes should be ensured and interactive educational meetings, together with reminders and educational outreach (Brusamento et al., 2012; Spallek et al., 2010).

The evidence and the positive experience from the previous PHC accreditation phases in Lebanon provides an opportunity to scale up the accreditation of PHCCs and include standards that are targeted to maternal and child health to ensure high quality of care, especially during antenatal and postnatal phases. The standards should mandate PHCCs to implement evidence-based guidelines in maternal and child health, which will ensure the standardization of care among PHCCs in Lebanon. Effective and efficient implementation of the accreditation system in PHCCs requires the support of the MOPH throughout the accreditation process, the designation of a body to monitor the implementation of standards and the application of capacity building practices for the staff in PHCCs on the implementation of accreditation standards and guidelines. This is to denote, it is essential to mandate evidence-based guidelines in all healthcare center, not only in PHCCs.

Additionally, as mentioned in various systematic reviews and primary studies, evidence-based guidelines for preterm deliveries can be beneficial in delaying preterm deliveries and treating preterm neonates. An example of a society that develops guidelines for this purpose is the Society for Maternal-Fetal Medicine (SMFM). This society supplies healthcare providers with toolkits and guidelines to facilitate clinical screening and intervention for the prevention of preterm births (SMFM, 2017).

Table 2 **Key findings** from systematic reviews and single studies

Category of finding	**Element 2**
Benefits	**Primary health care accreditation**
	1 systematic review and 1 literature review showed that health care accreditation standards in various countries including LMICs improved organizational productivity (Greenfield et al., 2012; Nicklin, 2015)
	2 systematic reviews, 2 literature reviews and 1 quantitative study found evidence that healthcare accreditation promotes change, professional development, team involvement, and staff circumstances (Chuang & Inder,

Category of finding	Element 2
	2009; Greenfield & Braithwaite, 2008; Greenfield et al., 2012; Nicklin, 2015; El-Jardali et al., 2014b)
	1 systematic review and 1 literature review found consistent evidence to support a positive impact of accreditation on clinical outcomes, quality of care and nursing care especially in the management of trauma, ambulatory surgical care, infection control and pain management (Alkhenizan & Shaw, 2011; Chuang & Inder, 2009).
	1 literature review mentioned that the implementation of accreditation programs promotes the use of ethical frameworks (Nicklin, 2015).
	12 high quality primary studies and 1 literature review reported that accreditation systems ensure the integration of a patient safety culture and enhance quality of care (Al-Awa et al., 2012; Chuang & Inder, 2009; Diab, 2015; Ho et al., 2014; Kohn, 2010; Kwon et al., 2013; Morris, 2012; Morton et al., 2014; Nguyen et al., 2012b; Nicklin, 2015; Pomey et al., 2004; Schwengel et al., 2011; Shaw et al., 2014; Teng et al., 2012).
	2 high-quality primary studies in Lebanon and Qatar showed that accreditation resulted in a better perception of quality improvement among employees (El-Jardali et al., 2008; Ghareeb, 2015).
	2 high-quality primary studies and 1 literature review showed that showed that accredited PHCCs had a higher patient and provider satisfaction rate (Al Tehewy et al., 2009; El-Jardali et al., 2014b; Nicklin, 2015).
	1 quantitative study in 23 PHCCs and 1 literature review showed that accreditation led to an improvement in documentation, implementation of standards, policies and procedures, rules, and regulations (El-Jardali et al., 2014b; Nicklin, 2015).
	Evidence-based guidelines
	8 systematic reviews reported that evidence-based practices (i.e. guidelines) ensure higher quality of care as a result of a significant improvement in skills, knowledge and attitude of providers (Bahtsevani et al., 2004; Dizon et al., 2012; Flodgren et al., 2012; Flores-Mateo & Argimon, 2007; Lugtenberg et al., 2009; Menon et al., 2009; Scurlock-Evans et al., 2014; Ubbink et al., 2013).

Category of finding	Element 2
	2 systematic reviews showed positive effects of various clinical interventions on preterm births and preterm birth outcomes (Bhutta et al., 2014; Morris et al., 2013). 1 overview of 75 systematic reviews pointed out that there are various clinical interventions that reduce preterm labor which include the use of antiplatelet drugs in less than 16 weeks of pregnancy and progesterone therapy (Morris et al., 2013).
Benefits	**Primary health care accreditation** 1 primary study in Taiwan reported that accreditation may decrease medical student's opportunities for learning and increase the staff's workload as a result of unnecessary paperwork (Ho et al., 2014). Evidence-based guidelines 1 systematic review found that evidence-based practice is thought to decrease therapeutic autonomy and thus reduce motivation to implement it (Scurlock-Evans, 2014)
Potential harms	**Primary health care accreditation** 1 systematic review and 3 studies found that accreditation generates higher costs on healthcare organizations due to the need for provider training, hiring additional providers, maintenance of infrastructure and buying or upgrading equipment (Greenfield & Braithwaite, 2008; Mihalik et al., 2003; Saleh et al., 2013) **Evidence-based guidelines** 1 systematic review and 5 studies found that implementing evidence-based practices reduces cost on health care organizations (Bahtsevani et al., 2004; Black et al., 2016; Considine & McGillivray, 2010; De Pedro-Gómez et al., 2012; Fineout-Overholt et al., 2005; Peterson et al., 2008)
Cost and/ or cost effectiveness in relation to the status quo	**Health care accreditation** 1 systematic review stated that the evidence of accreditation and certification of organizations remains unclear, thus conclusions cannot be drawn on the effectiveness of accreditation (Brubakk et al., 2015) 1 systematic review reported inconsistent findings in relation to the measurable impact of accreditation on clinical quality (Greenfield et al., 2012). 1 systematic review found inconclusive findings in relation

Category of finding	Element 2
	to employee's views on accreditation, impact on organization performance and finance, quality of care and patient satisfaction (Greenfield & Braithwaite, 2008). 1 primary study in Jordanian health care centers showed that accreditation does not have any effect on employee satisfaction (Diab, 2015) **Evidence-based guidelines** 1 systematic review found that the implementation of evidence-based practice does not always lead to high quality of care (Scurlock-Evans et al., 2014) 2 systematic reviews found that the implementation of evidence-based practice remains infrequent although it is accepted by health care workers and organizations (Scurlock-Evans et al., 2014; Ubbink et al., 2013)
Uncertainty regarding benefits and potential harms (so monitoring and evaluation could be warranted if the approach element were pursued)	**None found**

Element 3

Integrate task shifting into antenatal care in primary health care centers

Task shifting is a process of reallocating duties from one health care worker to another with less experience or qualifications (Laurant et al., 2005). This can be done from physicians to nurses, midwives, nursing assistants or community workers (WHO, 2007). Seven high quality systematic reviews found that task shifting increases access to care, improves the quality of care, and reduces preterm deliveries (Turienzo et al., 2016; Sandall et al., 2016; Lassi & Buhta, 2015; Lewin et al., 2008; Laurant et al., 2005; Horrocks et al., 2002, Martinez-Gonzalez et al. 2014). For instance, Lassi and Bhutta (2015) showed that training traditional birth attendants (TBA) to provide care during the antenatal and intrapartum period, can reduce stillbirths by 46% if they are accompanied by midwives. Moreover, training TBAs may reduce neonatal and perinatal mortality (Lewin et al., 2008; Lewin et al., 2010; Sibley, Sipe, & Koblinsky, 2004)

According to Horrocks et al. (2002) and Lauarant et al. (2005), the substitution of nurse practitioners by physicians may lead to better quality of

care. Furthermore, three systematic reviews found that patient satisfaction was higher when nurses, as opposed to doctors, provided first contact care for people wanting urgent attention or in primary care centers. This may be attributed to the fact that nurses tend to provide more information to patients and conduct longer consultations than doctors (Laurant et al., 2005; Lewin et al., 2008; Horrocks et al. 2002). Also, the risk for hospital admission and maternal and neonatal mortality was reduced with nurse-led care (Martinez-Gonzalez et al. 2014). One systematic review of 15 randomized control trials showed that alternative care (i.e. care led by midwives or nurses) reduces the risk of preterm birth by 16% in comparison to general practitioner-led care (Turienzo et al., 2016), with no evidence of adverse events. Another systematic review that included 15 RCTs of women with low-risk pregnancies and high-risk pregnancies but with no signs of complications reported that women receiving midwife-led continuity of care, had a 24% reduction in preterm birth in comparison to other models of care (i.e. obstetrician-provided care, family doctor-provided care, shared models of care) (Sandall et al., 2016). According to Horrocks et al. (2002), nurse practitioners compared to doctors conduct more laboratory investigations than physicians. One systematic review found that training and delineating a midwife in every village with specific responsibilities during pregnancy, delivery and postpartum care resulted in increased professional attendance, with the greatest increases occurring among the poorest two income quintiles (Yuan et al., 2014). Another systematic review reported that midwife-led care has the potential to reduce overall fetal loss and neonatal death, antenatal hospitalizations, and use of intrapartum analgesia (Sandall, 2008).

A high-quality study in rural Zimbabwe mentioned that the nurse-aides conducted 57% of all deliveries with a perinatal mortality rate of 5 per 1000, suggesting that nurse-aides could attend to low-risk births in this setting (Hofmeyr et al., 2009). Another high-quality study found that community health workers may reduce morbidity and mortality in children under five and neonates; and training TBAs may improve perinatal outcomes and appropriate referrals (Nabudere, Asiimwe & Mijumbi, 2011).

Also, some studies reported that the care provided by nurses was cheaper than the care provided by physicians (Overbosch et al., 2004; Dovlo, 2004); however, the cost-effectiveness of task shifting remains unreported (Laurant et al., 2005). Nonetheless, to ensure effective implementation of task shifting, it is essential to create legislations which require all health care agencies to be licensed and to observe specific standards of fair dealing with health workers which would protect the employees from unfair conduct and reduce conflict with current health professional regulations and licensure.

In the context of Lebanon, nurse to physician task shifting might not be feasible due to an oversupply of physicians and an undersupply of

nurses in Lebanon with a 2.48 per 1,000 ratio of physicians to population, which is the highest in the EMR, and a 1.18 per 1,000 ratio of nurse to population compared to a global average of 4.06 per 1,000 (El-Jardali et al., 2014).

Additionally, in Lebanon, nurses' education and competencies are not standardized nor is the nursing scope of practice legislated (El-Jardali et al., 2014a) which may have negative consequences on the care provided by nurses thus hindering the implementation of task shifting. As such, legislative changes are required to establish a nursing scope of practice.

Table 3 **Key findings** from systematic reviews and primary studies

Category of finding	Element 3
Benefits	7 high quality systematic reviews found that task shifting increases access to care and improves the quality of care delivered while reducing preterm deliveries (Turienzo et al., 2016; Sandall et al., 2016; Lassi & Buhta, 2015; Lewin et al., 2008; Laurant et al., 2005; Horrocks et al., 2002, Martinez-Gonzalez et al. 2014).
	1 systematic review showed that training TBAs to provide care during the antenatal and intrapartum period, can reduce stillbirths by 46%, if they are accompanied by midwives, and early and late neonatal mortality (Lassi and Bhutta 2015).
	1 overview of systematic reviews, 1 systematic review, and 1 literature review mentioned that training TBAs may reduce neonatal and perinatal mortality (Lewin et al., 2008; Lewin et al., 2010; Sibley, Sipe, & Koblinsky, 2004)
	2 systematic reviews found that care provided by nurse practitioners rather than physicians was of better quality (Horrocks et al. 2002; Lauarant et al. 2005).
	3 systematic reviews found that patient satisfaction was higher when nurses, as opposed to doctors, provided first contact care for people wanting urgent attention or in primary care centers (Laurant et al., 2005; Lewin et al., 2008; Horrocks et al. 2002).
	3 systematic review found that nurses tend to provide more information to patients and conduct longer consultations than doctors (Laurant et al., 2005; Lewin et al., 2008; Horrocks et al. 2002)
	1 systematic review and meta-analysis found that risk for hospital admission and mortality was reduced with nurse-led care (Martinez-Gonzalez et al. 2014).
	1 systematic review found that training and delineating a midwife in every village with specific responsibilities during

Category of finding	Element 3
	pregnancy, delivery and postpartum care resulted in increased professional attendance, with the greatest increases occurring among the poorest two income quintiles (Yuan et al., 2014). 1 high-quality study in rural Zimbabwe, mentioned that the nurse-aides conducted 57% of all deliveries with a perinatal mortality rate of 5 per 1000, suggesting that nurse-aides could attend to low-risk births in this setting (Hofmeyr et al., 2009) 1 high-quality primary study found that community health workers may reduce morbidity and mortality in children under five and neonates; and training TBAs may improve perinatal outcomes and appropriate referrals (Nabudere et al., 2011). 1 systematic review found that midwife-led care probably reduces overall fetal loss and neonatal death, antenatal hospitalizations, and use of intrapartum analgesia (Sandall et al., 2016)
Potential harms	A high-quality study mentioned that the quality of care in PHC settings might suffer from poor clinical decision-making or poor supervision of their practice (Dovlo, 2004). The perceived low costs may be offset by poor treatment results and outcomes to patients and high morbidity (Dovlo, 2004). 1 systematic review showed that productivity was lower when nurses, as opposed to doctors, provided first contact care for people wanting urgent attention (Laurant et al., 2005)
Cost and/ or cost effectiveness in relation to the status quo	It is uncertain whether there is any difference in the cost of care provided by nurses compared to the cost of care provided by physicians (Laurant et al., 2005) It is estimated that training of clinical officers was cheaper and further suggested that costs to the clients were lower (Dovlo, 2004). Overbosch et al. (2004) estimated that ANC received from doctors in Ghana cost the client about 38% more than if received from a nurse or a medical assistant.
Uncertainty regarding benefits and potential harms (so monitoring and evaluation could be warranted if the approach element were pursued)	1 systematic review showed that there is little to no difference in the number of prescriptions, return consultations, referrals, and quality of care or patient outcomes between nurses and physicians (Horrocks et al. 2002).

Element 4

Enhance outreach community-based interventions on family planning and antenatal care

Community participation has been recognized as an essential element in supporting maternal and neonatal health care services delivery for pregnant women and mothers (Lassi, 2010). Community participation in care may be implemented through community-based interventions (CBI) which incorporate the training of community health workers to provide care with or without the supervision of professional health care providers (Lassi, 2010). Community-based interventions can take the form of lectures, hands-on training, group meeting, outreach programs, community mobilization, home visitations and advocacy and support groups. In the case of the Syrian refugees, the most needed community-based interventions are around family planning and ANC, since delaying and spacing births may reduce pregnancy complications (i.e. preterm) and improve maternal health (Wilcher, 2010).

Four systematic reviews found CBI to be effective in reducing mortality and morbidity for babies and could improve care-related outcomes in disadvantaged communities (Lassi & Buhta, 2015; Brunton et al., 2014; Kidney et al., 2009). According to Lassi & Bhutta (2015), CBIs were effective in reducing maternal deaths, neonatal deaths (25% reduction), early and late neonatal deaths, stillbirths (19% reduction) and pregnancy complications (25% reduction).

Six systematic reviews found a positive association between CBI such as face to face and group sessions in community sites and schools, group meetings, awareness sessions, behavioral interventions and counseling married couples, their families and community members on family planning and their intention to use their knowledge of family planning methods in the short to medium term (Carter, Tregear, & Lachance, 2015; Carter, Tregear, & Moskosky, 2015; Lopez et al., 2016; Mwaikambo et al., 2011; Sarkar et al., 2015; Scott et al., 2015). Two systematic reviews and one qualitative comparative analysis showed that outreach programs by community health workers found community engagement interventions that are peer-led or implemented in collaboration with community members and professionals to be effective in improving antenatal consultation rates, immunization, breastfeeding practices (Brunton, 2014; Lassi, 2014; Lassi et al., 2015). Two systematic reviews reported that community level interventions tackling antenatal, natal, and postnatal newborn and maternal health care, showed a significant reduction in maternal morbidity (Kidney, 2009; Lassi et al., 2015). Moreover, two systematic reviews showed that the involvement of men in women and newborn health during antenatal and postnatal phases may

decrease gender inequity and positively affect maternal and child health outcomes, increase the utilization of ANC and reduce postpartum depression. One systematic review showed that birth preparedness and complication readiness interventions that include awareness and education sessions through home visits by community health workers and community mobilization activities increase the mother's knowledge of danger signs (Miltenburg, 2015). One systematic review found that community-based intervention also had an impact on referral to health care facilities in case of complications by community health workers (Lassi & Bhutta, 2015). One systematic review showed that social support CBI targeted to high-risk pregnancies (i.e. risk of preterm birth) compared to usual care led to a decreased possibility of antenatal hospital admission and C-sections (Lassi, 2014)

Other benefits of CBI were increased use of family planning methods (Curry, 2015) and reduced adolescent fertility (McQueston, 2013). However, the long-term effect of CBI remains unknown.

Having community members participating in CBI and building strong relations with local NGOs may improve the uptake of CBI especially for family planning (Carter, 2015)Finally, educating patients on family planning methods particularly on the side effects of contraceptives (Williams et al., 2015) may increase the usage of family planning methods.

Table 4 **Key findings** from systematic reviews and single studies

Category of finding	**Element 4**
Benefits	4 systematic reviews showed that CBI such as outreach programs and community mobilization significantly decrease neonatal and perinatal mortality and stillbirths (Kidney et al., 2009; Lassi & Bhutta, 2015; Lassi, Imam, Dean, & Bhutta, 2014b; Soubeiga, Gauvin, Hatem, & Johri, 2014).
	2 systematic reviews and 1 qualitative comparative analysis showed that outreach programs by community health workers found community engagement interventions that are peer-led or implemented in collaboration with community members and professionals to be effective in improving antenatal consultation rates, immunization, breastfeeding practices (Brunton et al., 2014; Lassi et al., 2014a; Lassi et al., 2015).
	2 systematic reviews reported that CBI tackling antenatal, natal, and postnatal newborn and maternal health care, showed a significant reduction in maternal morbidity (Kidney et al., 2009; Lassi & Bhutta, 2015).
	2 systematic reviews showed that the involvement of men in women and newborn health during antenatal and postnatal phases may decrease gender inequity and positively affect maternal and child health outcomes, increase the utilization of ANC and reduce postpartum depression (Comrie-Thomson et

Category of finding	Element 4
	al., 2015; Yargawa & Leonardi-Bee, 2015). 1 systematic review showed that birth preparedness and complication readiness interventions that include awareness and education sessions through home visits by community health workers and community mobilization activities increase the mother's knowledge of danger signs (Miltenburg et al., 2015). 1 systematic review found that community-based interventions also had an impact on referral to health care facilities in case of complications (Lassi & Bhutta, 2015). 1 systematic review showed that social support CBI targeted to high-risk pregnancies (i.e. risk of preterm birth) compared to usual care led to a decreased possibility of antenatal hospital admission and C-sections (Lassi et al., 2014a). 6 systematic reviews found a positive association between CBI such as group meetings, awareness sessions and behavioral interventions on family planning and intention to use knowledge of family planning methods in short to medium term (Carter, Tregear, & Lachance, 2015; Carter, Tregear, & Moskosky, 2015; Lopez et al., 2016; Mwaikambo et al., 2011; Sarkar et al., 2015; Scott et al., 2015). 1 systematic review showed that school-based interventions have the potential to reduce adolescent fertility (McQueston et al., 2013). 1 study in 5 crisis affected countries that include Chad, the Democratic Republic of the Congo, Djibouti, Mali, and Pakistan reported that the implementation of a family planning framework which includes competency based training, supply chain management, systematic supervision, and community mobilization, lead to an increased use of family planning methods (Curry et al., 2015).
Potential harms	There were no reported harms in the literature on CBI and family planning.
Cost and/ or cost effectiveness in relation to the status quo	Community health worker services are relatively of low cost but the cost effectiveness of CBI remains unknown (Scott et al., 2015).
Uncertainty regarding benefits and potential harms (so	There were no reported medium to long term impacts of community engagement on family planning (Carter, Tregear, & Lachance, 2015). Outreach programs that include lectures and hands-on

Category of finding	Element 4
monitoring and evaluation could be warranted if the approach element were pursued)	training, implemented by community workers and supervised by health care professionals, tackling basic antenatal, natal and postnatal care and newborn health, breastfeeding, showed no impact on maternal mortality (Lassi & Bhutta, 2015). CBI that trained TBAs who conducted home visits reported non-significant impact on maternal and neonatal health (Lassi & Bhutta, 2015).

Implementation considerations and counterstrategies

Barriers to implementation of the four elements are at the patient, professional, organizational and system levels. Counterstrategies to overcome these barriers are suggested and are retrieved from evidence and experiences of other countries.

Level	Barriers	Element(s)	Counterstrategies
Patient	Two systematic reviews and one high-quality study found that women may delay or avoid ANC because they are used to pregnancy due to previous experiences (Pell, Straus, Andrew, Meñaca & Pool, 2011; Simkhada et al., 2008; Mathole et al., 2004)	1	One systematic review mentioned that seven studies found that knowledge of family planning and ANC has a positive and statistically significant effect on ANC use (Simkhada et al., 2008)
	One reason for not attending ANC at the first trimester was fear associated with the local belief that the early period of pregnancy was most vulnerable to witchcraft (Simkhada et al., 2008)	1	Raising awareness about the purpose and use of ANC has a positive impact on women attending ANC services (Simkhada et al., 2008).
	Ideas about the purpose of ANC services influenced ANC attendance. ANC was viewed as a service for treatment rather than prevention thus women only attended when ill (Pell et al., 2011; Mathole et al., 2004)	1	
	The cost of contraceptives discouraged Afghan Refugee Women in Pakistan to use it (Raheel et al., 2012).	4	Subsidization of healthcare cost has the potential to increase contraceptive use (Raheel et al., 2012)
	One systematic review showed that females are concerned about the side effects of contraceptives (Williams et al., 2015)	4	Females should be provided with proper education about family planning methods in a language that they can understand and information that is relative to their age especially regarding the safety of the contraceptive methods (Williams et al., 2015)

Level	Barriers	Element(s)	Counterstrategies
Professional	Health workers lack incentives to expand their roles. Reimbursement systems of health workers do not provide incentives for appropriate delivery of cost-effective interventions (WHO, 2007; Dovlo, 2004; O'Brien & Gostin, 2008).	3	Providing incentives to health workers has a positive effect on having an appropriate delivery of cost-effective interventions (WHO, 2007; Nabudere et al., 2011).
	Death/loss of skilled health professionals in poor and conflict areas is the one of the greatest health system specific barrier (Lassi & Buhta, 2015; O'Brien & Gostin, 2008).	3	Building health systems, in particular, training and employing health workers to deal holistically with the most pressing health problems experienced by the poor (O'Brien & Gostin, 2008)
	Moreover, some of the task shiftings may be in conflict with current health professional regulations and licensure (WHO, 2007).	3	The creation of legislation which requires all health professionals' recruitment agencies to be licensed and to observe specific standards of fair dealing with health workers, particularly migrant workers, throughout the recruitment relationship, would protect against unfair conduct and reduce conflict with current health professional regulations and licensure (O'Brien & Gostin, 2008).
	One systematic review in the United States reported that lack of human resources' time to participate in community engagement activities may deter the implementation of community-based interventions (Carter, Tregear, & Lachance, 2015).	4	The inclusion of local university students in community-based interventions may facilitate the implementation of community engagement (Carter, Tregear, & Lachance, 2015).
	Health care professionals doubt the impact of accreditation on quality of care (Alkhenizan & Shaw, 2012).	2	The education of healthcare professionals on the importance of accreditation on potentially improving care is essential to ensure the implementation of accreditation (Alkhenizan & Shaw, 2012)
	Resistance of providers to adopt guidelines due to lack of agreement with recommendations, lack of time, knowledge and financial incentives as well as a reluctance to	2	Reduce complexity of guideline recommendations; ensure robust and active dissemination strategies that target

Level	Barriers	Element(s)	Counterstrategies
	change practice (Brusamento et al., 2012)		practitioner's attitudes; promote interactive educational meetings together with reminders and educational outreach (Brusamento et al., 2012; Spallek et al., 2010)
	Many PHCCs in Lebanon have a shortage of employees that are qualified by training and education to implement accreditation standards (F. El-Jardali et al., 2013)	2	Capacity building for staff working at PHCCs in Lebanon should be done in parallel with the implementation of accreditation programs (F. El-Jardali et al., 2013)
Organizational	Lack of financial sustainability in PHCCs in Lebanon may hinder the implementation of accreditation standards (F. El-Jardali et al., 2013)	2	Financial assistance from authorities such as the Ministry of Public Health (MOPH) in Lebanon is essential to support PHCCs in the implementation accreditation (F. El-Jardali et al., 2013)
System	ANC use is influenced by the patients' place of residence, distance to center and transport to health care facilities. (Simkhada et al., 2008; Pell et al., 2011; Mathole et al., 2004; Mrisho et al., 2009; Magadi et al. 2000; Glei et al. 2003). An increase in distance or travel time to the nearest health care facility was associated with fewer ANC visits (Magadi et al., 2000), and lower uptake of ANC (Nielsen et al. 2001; Simkhada et al., 2008)	1	One high-quality study found that the cost of consultation and in particular transportation and distance to the provider can be decreased by extending the supply of ANC services in the rural area (Overbosch et al., 2004)
	One systematic review and 2 primary studies mentioned that the costs of the service including transportation and necessary laboratory tests were major factors prohibiting service utilization (Adamu & Salihu 2002, Overbosch et al. 2004; Simkhada et al., 2008)	1	
	The costs of visiting antenatal facilities were viewed as a significant factor in restricting or inhibiting access to ANC (Finlayson & Downe, 2013).	1	

Level	Barriers	Element(s)	Counterstrategies
	Political and legal restrictions may deter the usage of family planning sessions as some communities may view those topics as too sensitive (Carter, Tregear & Lachance, 2015).	4	Having community members participating in the community-based interventions such as family planning sessions and developing strong relations with local NGOs may develop acceptance to the topic among the community (Carter, Tregear & Lachance, 2015)
	There are no clear policies, procedures, and guidelines in Lebanon to direct the implementation of accreditation (El-Jardali et al., 2013)	2	The process of implementing accreditation in Lebanon should ensure the development of clear policies, procedures, and guidelines prior to the implementation of accreditation (El-Jardali et al., 2013)
	One study in Lebanon showed that the absence of follow-up from authorities may hinder the continuity of accreditation implementation (El-Jardali et al., 2013)	2	Constant monitoring from delineated authorities in Lebanon is crucial for the sustainability in the implementation of the accreditation (F. El-Jardali et al., 2013)

Next Steps

Next Steps

The aim of this policy brief is to foster dialogue informed by the best available evidence. The intention is not to advocate specific policy options/elements or close off discussion. Further actions will flow from the deliberations that the policy brief is intended to inform. These may include:

- Deliberation amongst policymakers and stakeholders regarding the policy elements described in this policy brief.
- Refining elements, for example by incorporating, removing or modifying some components

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