

Assessment of Reasons for Partial Compliance and Non-compliance to the Routine Childhood Vaccination Schedule in Al-Karkh District

تقييم أسباب الامتثال الجزئي وعدم الامتثال بجدول التطعيمات الروتينية للأطفال في منطقة الكرخ

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المستخلص

الأهداف: لتقييم أسباب الامتثال الجزئي وعدم الامتثال لجدول التطعيم الروتيني للأطفال في منطقة الكرخ. **المنهجية:** تم إجراء دراسة وصفية ، باستخدام منهج التقييم ، خلال الدراسة الحالية لتحديد أسباب التطعيم الروتيني للطفولة في قطاعات الرعاية الصحية ومراكز الرعاية الصحية الأولية في منطقة الكرخ بمدينة بغداد. كانت العينة ملائمة غير احتمالية قوامها (٩٠) أم تم استخدامهم من قطاعات الرعاية الصحية في منطقة الكرخ في مدينة بغداد. وقعت جميع الأمهات اللاتي شاركن في الدراسة على إستمارة الموافقة على المشاركة في الدراسة. تم بناء أداة الدراسة من خلال مراجعة الأدبيات ذات الصلة. تتألف الاداة من مجموع أسئلة عن الأسباب المسؤولة عن الامتثال الجزئي وأسباب عدم الامتثال لجدول التطعيم الروتيني للأطفال. تم تحديد صلاحية المحتوى وموثوقية الإتساق الداخلي لأداة الدراسة من خلال الدراسة التجريبية. تم جمع البيانات من خلال استخدام أداة الدراسة وتطبيق المقابلة المنظمة كوسيلة لجمع البيانات. تم تحليل البيانات من خلال تطبيق أسلوب تحليل البيانات الإحصائي الوصفي التكرارات والنسبة المئوية ومتوسط الدرجات .

النتائج: أن الأمهات قدمن أسبابًا مختلفة للامتثال الجزئي وعدم الامتثال لجدول التطعيم الروتيني للأطفال. **الاستنتاجات:** أسباب الامتثال الجزئي لجدول التطعيم الروتيني للأطفال التي تضمنت مرض الطفل والمشاكل الأسرية ومنها مرض الام والخوف من اعراض جانبية للتلقيح وتأجيل التطعيم لمرة اخرى في منطقة الكرخ. تم تحديد هذه الأسباب كجزء من المعوقات ونقص المعلومات وعدم وجود أسباب الدافع وكذلك ان أسباب عدم الامتثال لجدول التطعيم الروتيني للأطفال تشمل الى أن الأطفال غير محصنين بسبب المرض والخوف من الآثار الجانبية بعد التطعيم و وقت التطعيم غير مناسب في منطقة الكرخ في مدينة بغداد. تم اكتشاف هذه الأسباب باعتبارها الأسباب الرئيسية لتأخير التطعيم **التوصيات:** توصي الدراسة بضرورة تنفيذ جدول التطعيم الروتيني للأطفال ومراقبته بجدية. يمكن إجراء المزيد من الدراسات الوطنية حول هذا الموضوع وعلى نطاق واسع.

الكلمات المفتاحية: تقييم ، الامتثال الجزئي ، عدم الامتثال ، جدول التطعيمات الروتينية للأطفال

Abstract

Objective (s): To assess reasons for partial compliance and non-compliance to the routine childhood vaccination schedule in Al-Karkh district.

Methodology: A descriptive study using the evaluation approach is carried throughout the present study to determine the reasons for the Routine Childhood Vaccination at health care sectors and primary health care centers at Al-Karkh District in Baghdad City. Convenient, non-probability, sample of (90) mother who are recruited from health care sectors at Al-Karkh District in Baghdad City. All mothers, who have participated in the study, have signed consent form for their agreements for the participation in the study. An interview-schedule is constructed for the purpose of the study. The study instrument is constructed through the review of relevant literature. It is comprised of reasons responsible for partial compliance and Reasons for Non-compliance to the routine childhood vaccination schedule. Content validity and internal consistency reliability of the study instrument are determined through a pilot study. Data are collected through the use of the study instrument and the application of the structured interview as means of data collection. Data are analyzed through the application of the descriptive data analysis approach of frequency, percent and mean of scores.

Results: Mothers present different reasons for partial compliance and non-compliance for routine childhood vaccination schedule.

Conclusions: Reasons for partial compliance for routine childhood vaccination schedule are identified as part of the obstacles, lack of information and lack of motivation reasons and reasons for non-compliance for routine childhood vaccination schedule are discovered as the main causes of the vaccination delay.

Recommendations: Reasons for partial compliance and non-compliance to routine childhood vaccination schedule should be seriously screened, monitored and taken into a consideration for future planning. Further national studies can be conducted on such topic and on a wide-range scale.

Ke Words: Assessment, Partial compliance, Non-compliance, Routine Childhood Vaccination Schedule

Introduction

Compliance to immunization schedule is pivotal in ensuring that population reap the full benefit of immunization. At the same time compliance may be influenced by many factors including the care givers' level of knowledge on the importance of immunization to their children ⁽¹⁾.

Factors implicated for parental non-compliance includes; lack of knowledge about immunization. Socioeconomic status, particularly mother's education, family size income and race are factors that have consistently been shown to influence whether a child receives a vaccine or not. Ease of access to health care services, such as short clinic waiting hours, and convenient location of health care facility are factors that contribute to parental compliance. Significant association exist between compliance with routine immunization and parental level of education, mother's age, parity, family income, health care provider types, and place of birth of the child. Also, parents with highest educational qualification below secondary school level were more likely to be non-compliant with routine immunization. Reasons for partial immunization include concerns by parents on the safety of vaccines, absence of personnel at the health facility, lack of information about the days of vaccination, social engagements, lack of money, schooling mothers and parents' objection ⁽²⁾.

The timing and spacing of vaccination doses are two of the most

essential considerations in vaccine administration. To get the best possible outcome from each vaccination, adhere to the current recommended vaccination schedules for children, teenagers, and adults ⁽¹⁾.

A community-based study was conducted in eight rural and one urban kebele from April to October 2013, to find out the vaccination coverage of children aged (12–23 months) who were fully vaccinated and their associated factors. This is done by using the systematic sampling method to select samples. Trainee nurses were sent to (497) representative families to collect data on (497) children between the ages of 12 and 23 months who lived there. The results show that about (49%) of children aged 12-23 months were fully vaccinated by card and mother recall, and only (1.6%) of children were not vaccinated at all. The study also indicated that when it comes to full vaccination, urban mothers have a greater response to vaccination than mothers in rural areas, and it also has an effect on sending the child to a health institution during illness in the first year of life, and birth in the institutional, as well as the effect of parents who have completed primary education and above, from factors that are associated with increased vaccination coverage ⁽³⁾.

More than (1,200)child under the age of five living in Bom Jesus, Angola, were surveyed cross-sectional by the 2010 census. This cross-sectional census of households was also conducted. It was important to consider vaccination coverage and the factors that led to full vaccination. The

percentage of children who were fully vaccinated according to the immunization schedule was (37.0) percent. They were higher in children less than 1 year of age (55.0) percent and heterogeneous across neighborhoods; (52.0) percent of both sexes had no immunization records. Vaccination rates were very different depending on the child's age, mother's education, and family size ⁽⁴⁾.

In 2020, global coverage fell from (86 percent) in 2019 to (83 percent). The number of infants under the age of one year who did not get basic immunizations increased to (23) million, the highest number since 2009. The number of children who are entirely unvaccinated is expected to rise by (3.4) million by 2020. In 2020, just (19) vaccines will be introduced, which is fewer than half of any year in the previous two decades. In 2020, (1.6) million more girls will be unprotected against by the human papillomavirus (HPV) than in the previous year ⁽⁵⁾.

Evidence from reviewed literature showed that parental partial compliance and non-compliance are major factors for non-immunization of children in Iraq. However, there is a dearth of empirical data about the context of improving parental compliance. This study therefore assesses the reasons of partial compliance and non-compliance to

routine childhood vaccination schedule in Al-Karkh District.

Methodology

Descriptive design, using the assessment approach, is carried throughout the present study to determine the reasons for the Routine Childhood Vaccination Schedule at Al-Karkh District in Baghdad City for the period of October 15th 2021 through May 1st 2022.

Convenient, non-probability, sample of (90) mother who are recruited from health care sectors at Al-Karkh District in Baghdad City. All mothers, who have participated in the study, have signed consent form for their agreements for the participation in the study.

An interview-schedule is constructed for the purpose of the study. The study instrument is constructed through review of relevant literature. It is comprised of reasons responsible for partial compliance and Reasons for Non-compliance to the routine childhood vaccination schedule. Content validity and internal consistency reliability of the study instrument are determined through pilot study.

Data are collected through the use of the study instrument and the application of the structured interview as means of data collection. Data are analyzed through the application of the descriptive data analysis approach of frequency and percent.

Results

Table (1): Reasons Responsible for Partial Compliance to the Routine Childhood Vaccination Schedule in Al-Karkh District (n = 90)

Reasons	Frequency	Percent
Obstacles		

Mother is too busy	24	26.7
Place of immunization is too far	16	17.8
The child is ill	46	51.1
Long Vaccination Waiting Period	14	15.6
Family problem including illness of mother	32	35.6
Vaccine is not available	37	41.1
Lack of information		
Un of the need of vaccination	31	34.4
Unaware of the need to return for 2nd or 3rd Dose	14	15.6
Fear of side effects	54	60.0
Lack of motivation		
Postponed to another time	62	68.9
No believe in vaccination	14	15.6

Results, out of this table, depicts that the child who is ill accounted for (51.1%) of the obstacles, fear of side effects (60%) of lack of information and postponed until another time (68.9%) of lack of motivation as reasons responsible for partial compliance to routine childhood vaccination schedule in Al-Karkh District.

Table (2): Reasons for Non-compliance to the Routine Childhood Vaccination Schedule in Al-Karkh District (n = 90)

Reasons	Frequency	Percent
The child unvaccinated because of illness	42	46.7
Fear of side effects after vaccination	48	53.3
Unavailability of the vaccine	27	30.0
Mother does not have the information about	29	32.2

the routine vaccination schedule		
Mother is unaware of the need for vaccination	35	38.9
The time for vaccination is not convenient	47	52.2
The distance of the vaccination place	17	18.9
The mother is busy	27	30.0
Crowding at the vaccination unit	20	22.2
The mother distrusts the vaccination	15	16.7

Results, out of this table, show that Fear of side effects after vaccination is accounted for (53.3%) as reason for non-compliance to the routine childhood vaccination schedule in Al-Karkh District.

Discussion

Part I: Discussion of Reasons for Partial Compliance to the Routine Childhood Vaccination Schedule in Al-Karkh District

Analysis of such reasons depict that most of the reasons for partial compliance to the routine childhood vaccination schedule, are that the child is ill (51.1%) and the vaccine is not available (41.1%). These reasons are recognized as the first priority factor as obstacle for the routine childhood vaccination coverage.

The challenges women have in attending primary health care clinics (50) percent and a lack of knowledge are the major causes of incomplete compliance (31) percent. In addition, insufficient awareness, inconvenient scheduling for moms, literacy level and employment of mothers, birthing order, and family type are also factors to consider (6).

With respect to the second priority reasons of lack of information, the study findings indicate that fear of side effects is highly accounted for the most reason of lack of information (60.0%).

Relative to lack of motivation as third priority reasons for partial compliance for routine childhood vaccination schedule, the study findings reveal that the vaccination is postponed until another time (68.9%).

Part II: Discussion of Reasons for Non-compliance to the Routine Childhood

Vaccination Schedule in Al-Karkh District

Analysis of the reasons for non-compliance to the routine childhood vaccination schedule in Al-Karkh District depict that the first priority reasons for such non-compliance are fear of side effects after vaccination (53.3%); the time for vaccination is not convenient (52.2%) and the child is

unvaccinated because of illness (46.7%).

In a study in Northwest Ethiopia, it was concluded that mothers in urban areas have an effect on their children's access to the full level of vaccination. Mothers who are familiar with the information on the vaccination schedule and the vaccination areas are obligated to take their children for vaccination, even if they are sick. This shows that when mothers go to the nearest vaccination site, it may take less than (30) minutes. This indicates that there is a negative relationship with children reaching full vaccination ⁽⁷⁾.

Conclusion

Reasons for partial compliance for routine childhood vaccination schedule are identified as part of the obstacles, lack of information and lack of motivation reasons and reasons for non-compliance for routine childhood vaccination schedule are discovered as the main causes of the vaccination delay as the main causes of the vaccination delay.

Recommendation

The study recommends that reasons for partial compliance and non-compliance to routine childhood vaccination schedule should be seriously screened, monitored and taken into a consideration for future planning, as well as further national studies can be conducted on such topic and on a wide-range scale.

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