220 - EDUCATIONAL PRIMER IN MOTHER GUIDANCE TO GUTHRIE'S TEST

SILVANA HELENA NEVES DE MEDEIROS JERÔNIMO
MARGARETH AUXILIADORA DA SILVA OLIVEIRA
MYLLA GABRIELLE SOARES DE ARAÚJO
RICHARDSON AUGUSTO ROSENDO DA SILVA
REJANE MARIE BARBOSA DAVIM
Programa de Pós-Graduação em Enfermagem/UFRN - Natal/RN - Brasil
E-mail:silvanahmj@bol.com.br

INTRODUCTION

The heel prick test had its beginning in 1961, developed by an American professor Robert Guthrie dosing phenylalanine in dry blood samples, collected on filter paper (BRAZIL, 2004). In 1976, in Brazil, the first disease to be screened for phenylketonuria was by Professor Benjamin Schmidt in APAE / SP (SOUZA, SCHAWRTZ, GIUGLIANI, 2002; BONATO et al, 2005).

Currently, this strategy is used for early diagnosis of genetic diseases and infectious diseases before symptoms are evident, raising the early treatment and reduced or eliminated the vestiges associated with each disease. The newborn screening test can diagnose the private sector average of 30 metabolic diseases and in public, depending on location, four groups: congenital hypothyroidism, cystic fibrosis, hemoglobinopathies and hyperphenylalaninemia (SOUZA, SCHAWRTZ, GIUGLIANI, 2002).

The relevance and effectiveness of this test have been adopted by both the Ministry of Health (MOH), and by the World Health Organization (WHO) to reduce the incidence of disability especially those in developing countries. The Statute on Children and Adolescents (ECA), according to the law 8069 of 13/07/1990 in Chapter I, Article 10, item III cites that hospitals and health care for pregnant public and private, have a duty to carry out the tests for the diagnosis of abnormalities in the metabolism of the newborn, as well as provide guidance to parents (BRASIL, 2005).

In 2001, to organize a test network, the Ministry issued the directive GM / MS No. 822 creating the National Neonatal Screening (PNTN), by enlarging the approach, strengthening, in addition to performing, care and monitoring of users diagnosed (BRASIL, 2004).

The newborn screening in the state of Rio Grande do Norte is regulated by Decree No. 915 of November 25, 2002 by detecting two conditions: the fenilcetunúria, a hereditary disease caused by insufficient production of the enzyme responsible for metabolism of phenylalanine and congenital hypothyroidism, causing partial deficiency or total production of thyroxine (T4) (BRASIL, 2001).

According to Silva and Zagonel (2002), the NNSP has as its goal the prevention of sequelae, expanding measures to create media in the promotion and reduction of morbidity and mortality related to congenital diseases in Brazil. For this, you need an educational awareness of the population regarding the importance of newborn screening.

Given this and the need for educational resources, developed as a methodological strategy for teaching and learning for health education in a public service, an educational booklet about the newborn screening test, this feature out to be of simple handling outside wall and relevant to the educational process. The proposed construction for this study occurred in an attempt to improve knowledge about the newborn screening test for postpartum women, with a view to professional practice in University Hospital Ana Bezerra, complex Federal University of Rio Grande do Norte (HUAB UFRN) at the time of discharge.

In these mothers return to the hospital to perform the newborn screening test, it was discovered that the same understanding of this practice little change despite the verbal orientations held during the hospital stay, even for those who had taken the test in other children. Then came the concern with educational practice developed, and seeking to improve the basic knowledge of these mothers, there was a need for a new strategy for the service. With the emergence of educational booklet aimed to arouse the interest on the subject, assuming that the information given from visual educational material associated with verbal guidance would promote understanding of sustainable and effective for these mothers.

The relevance of this study comes from the perspective of an educational practice in primary care with the use of the folder as a methodological gap in health promotion. Based on these considerations, had as general objective for this research was to evaluate the use of educational booklet on newborn screening, and how specific: to develop an educational booklet about the newborn screening test, use this booklet as a tool for health education intervention group; to verbal guidance on newborn screening mothers in the control group and to verify the existence of differences in knowledge of mothers in the intervention group and control group.

METHOD

The current study design was prospective and intervention that aims to compare the effect and value of an intervention, with controls in humans, where the researcher distributes factor intervention being examined at random. Thus, the experimental and control groups are formed by a random process of decision (MEDRONHO, 2006).

The site for the research was the University Hospital Ana Bezerra (HUAB), located in Santa Cruz, State of Rio Grande do Norte in the Northeast of Brazil. The institution was chosen for the development of professional practice and be a referral hospital for a population of low education and low family income, thus requiring an investment in health promotion. The population was composed of mothers living in Santa Cruz and who delivered their children in HUAB, receiving guidance from the nurse's service with the prospect of returning to the test in the institution in the period of data collection.

For the sample data was considered the annual report of the proceedings of the delivery room of HUAB for the year 2006, there being the realization of 1203 procedures annually with a monthly average of 100 deliveries a month. Was used, so 50% of the monthly average of births for each of the two groups, a total number of 20 users surveyed for the control group and 20 for the intervention.

Formed two groups, the collection had its beginning by the control group, consisting of mothers included in the first month and who received only verbal guidance on the newborn screening test without the use of the booklet. Subsequently, the intervention group received verbal guidance on the newborn screening test upon delivery of the folder in the second month of the survey.

The criteria for inclusion in the sample to be studied were the mothers who gave birth in HUAB with prediction of return to completion of newborn screening, willing to participate in the study by signing an Informed Consent (IC), and those who

responded to the interview at the completion of newborn screening. And exclusion, those mothers living in other municipalities, who declined to sign the FICT and requested its withdrawal from the study.

To verbal information about newborn screening, were similar to those two groups and those receiving the booklet were instructed to bring it into a return visit for the purpose of giving the value assigned by the study participants to the instrument. Data collection took place using a standard interview questionnaire with open and closed to mothers on the return to perform the newborn screening. He took part also as a tool to collect data on educational booklet developed by the researchers were based on topics based on Standards Manual and Operational Routines of the National Neonatal Health Ministry, containing basic guidelines on newborn screening.

Prior to data collection, the interview guide and booklet were submitted to pre-test at the institution with five users and five nurses attached to the heel prick test, to evaluate the content and format of the instruments. After institutional consent and assent of the Ethics Committee of the Federal University of Rio Grande do Norte, has begun collecting data on an individual basis on Mondays at the outpatient HUAB, on the return of the mothers in achieving the newborn screening.

The guidelines were made in two ways. In the first months were given only verbal guidance (control group) to explain: what is the test, why is it important, what diseases detectable by basic test, as is done, how long and where to catch the result. In the second month, in addition to verbal guidelines listed above, was also given the educational booklet (intervention group) so that it could be handled at home and returned with the patient for consultation with breastfeeding.

The processing and analysis of data were organized so that the 40 interviews used were stored in a spreadsheet program Excel, and categorized and sorted according to each variable and presented in relative and absolute distributions, for a statistical description.

RESULTS

Had as main results that 22.5% of mothers without primer targeted were aged between 24 - 29 years old, and 17.5% between 19 and 23 years, whereas those mothers who received a short letter, 25 % were aged 24 - 29 years and 20% aged between 19 - 23 years. As for education 25% of the two populations, ie 50% of the sample had to 4 to 7 years of study.

The monthly family income of these mothers was mentioned in about 35% of those targeted without primer and 30% of the target with the book, making a total of 65% of the sample, which survive on an income of one minimum monthly wage. As the local housing equal percentage (35%) of the two populations living in rural areas, totaling 70% of the sample.

It was observed that the range for the implementation of newborn screening, 95% of mothers who received the booklet took their children to take between 16 - 28 days, since 80% of the target to the booklet had a child between 5 -- 15 days, range mentioned in the booklet for the test, indicating the importance of health education.

When asked about what the newborn screening, we identified that 70% of mothers who received the booklet said it was to identify a disease as 66% of targeted only verbally gave the same response, consistent service with what was discussed verbally and primer.

The importance of newborn screening for the baby pointed to by the interviewees who received only verbal guidance, 50% reported that it was to identify and treat any disease, 25% for prevention of disease, whereas 85% of those who received the brochure reported that was to identify and treat any disease followed by 5% who say it is only to identify any disease. It was observed that the respondents with access to the book have a better understanding, because, in addition to identifying a disease, the test also influences the early treatment of these diseases. The time interval between collection and receipt of income, 75% of mothers who received the booklet said it was between 30 - 45 days compared to 100% of the mothers targeted to the booklet.

About the diseases can be detected by newborn screening, the group receiving the booklet marked 95% to 75% hypothyroidism and phenylketonuria, while only verbally oriented group, 40% scored 35% diabetes and cancer, leaving separately phenylketonuria and hypothyroidism with the same percentage (25%) in third place. Within this context, 80% of mothers conducted with the primer mentioned two diseases and a 20%, respectively over 25% and 50% of mothers who were advised verbally.

As the form of the test identified that 100% of the women who received the booklet said it was through a hole in the child's foot, and 80% of those who received only verbal guidance.

DISCUSSION

The research showed that 47.5% of the sample were aged between 24 - 29 years and 50% had 4 to 7 years of schooling. In 2001, a study in Campinas, SP, found that 82% of deliveries were in women over 20 years and nearly half of all these women had up to 7 years of study completed, confirming the results of this study.

Of the mothers interviewed 65% were from low income to survive with a monthly minimum wage and 70% resided in rural areas of the city studied, agrees with the results of Garcia, Ferreira and Oliveira (2007) on the newborn screening test, which stated that 36% of the population served in the reference city schools receive a minimum monthly wage.

The range for the exam, 95% of the population who did not receive the booklet Testing between 16 and 28 days and 80% of a brochure targeted between 5 and 15 days, which was reported in the booklet, which is still out determined as appropriate by the Health Ministry calling for the collection preferably between the 3rd and 7th days of life, no earlier than 48 hours and not later than 30 days.

Most mothers who received the booklet had a better understanding of what was the test and what is its importance, but also had vague answers as to what was evidenced in the research of Torres and Torres (2005) on newborn screening in the municipality of Natal / RN, corroborating the information of the interviewees in relation to this practice, which are so superficial, given that none of the relatives said the detection of metabolic errors with its purpose.

On being questioned as was the examination, it was observed that both samples were mostly correct answers, there being no error in those who received the booklet. This was also confirmed with the study of Santos et al (2007), by claiming in his study of an educational manual, which, illustrations and colors, help to arouse the reader's attention. With reference to time to receive the result was evident, since the majority of the respondents replied that it was between 30 and 45 days.

For diseases detected in the test, it was important to the book, since it contributes significantly to the understanding of these diseases the basic test in the state of Rio Grande do Norte, with 95% of the mothers targeted primer responded with hypothyroidism and phenylketonuria 75% over mothers who responded verbally targeted 25% for both for hypothyroidism and phenylketonuria.

Thus in the understanding of what is the newborn screening test can be stated that the subjects who received only verbal guidance showed a deficit in understanding what was evidenced in the study by Torres and Torres (2005), identifying a significant number of surveyed were unaware of the diseases that are detected by this test.

Garcia, Oliveira and Ferreira (2007), identified in their studies that the mothers were interviewed wished to have more

clarification on any screening test, 44% wanted clarification: what diseases can be prevented if they test positive to do and that the test is exactly. This demonstrates once again the importance of the use of educational strategies as a resource to promote child health.

Regarding the form of the test, Souza, and Schawrtz Giugliani (2002) reported that it is through the use of blood spots collected on the sole of the baby. In this study, 100% of the respondents who had access to the booklet said they gave to this collection with a hole in the child's foot, over 80% of those who did not receive the booklet. Also note that the study by Garcia, Oliveira and Ferreira (2007), 85% of respondents correctly described as attached to the collection, expressing some knowledge about the test, without having been informed earlier.

CONCLUSION

Health education is a necessity for nursing, given the well-being of others using innovative strategies. The results of this study point to an improved understanding of the women who received the booklet in addition to verbal guidance on the newborn screening test and that the information voiced by a health professional is not enough for such education. Importantly, the nurse should raise the mothers still in prenatal care on the importance of this practice. Before this can be said of this research, the educational booklet developed is a tool for heath education, and thus it is expected that the institution study adopts the same as a pedagogical strategy.

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Principal Autor:

SILVANA HELENA NEVES DE MEDEIROS JERÔNIMO: Rua Mosenhor José Paulino, 1076, Edifício Millenium, Apto, 1310, Tirol, Natal/RN, CEP: 59022-200. E-mail:silvanahmj@bol.com.br

Co-autores:

MARGARETH AUXILIADORA DA SILVA OLIVEIRA: m_oliveira16@yahoo.com.br

MYLLA GABRIELLE SOARES DE ARAÚJO: myllagaby@hotmail.com

RICHARDSON AUGUSTO ROSENDO DA SILVA: risorendo@yahoo.com.br

REJANE MARIE BARBOSA DAVIM: rejanemb@uol.com.br

EDUCATIONAL PRIMER IN MOTHER GUIDANCE TO GUTHRIE'S TEST

ABSTRACT

The newborn screening is a strategy employed for early detection of errors of metabolism before symptoms become apparent, enabling early treatment and the specific reduction or elimination of complications associated with each disease. Currently, this test can diagnose the private system, about 30 metabolic disorders and the public (depending on the state), four groups of diseases: congenital hypothyroidism, cystic fibrosis, hemoglobinopathies and hyperphenylalaninemia. Had as objective for this study was to evaluate the implementation of an educational booklet about the newborn screening test as a tool for health education for mothers. The venue was the University Hospital Ana Bezerra (HUAB), located in Santa Cruz, State of Rio Grande do Norte in the Northeast of Brazil. The institution was chosen for the development of professional practice and be a referral hospital for a population of low-income and low educational level thus requiring an investment in health promotion. Data collection was conducted with 40 mothers in HUAB, from March to June 2008. Of the 40 mothers interviewed, 20 were trained on what is the heel prick test only verbally and 20 beyond the verbal guidance received the booklet and had the opportunity to handle them at home. So, being shown that the majority of mothers who received the booklet had a better understanding of what was the test and what is its importance. Results showed that the educational booklet improved understanding of the interviewees in relation to this practice may be said of this research, the booklet prepared to fulfill its role as a tool for health education, and thus it is expected that the study hospital adopt the same as a pedagogical strategy for health education in the population of the municipality.

KEYWORDS: Health education, nursing, health of the child.

ABÉCÉDAIRE ÉDUCATIF DANS L´ORIENTATION MATERNELLE AU TEST DE DÉPISTAGE NÉONATAL

RÉSUMÉ

Le test de dépistage néonatal est une stratégie employée pour la diagnose précoce de fautes du métabolisme avant que les symptômes deviennent évidents, en permettant le traitement précoce et la diminution ou élimination des séquelles associées à chaque maladie. Dans l´actualité, ce test peut diagnostiquer, par le système privé, par approximation 30 maladies métaboliques, et par celui publique, (selon l´état), quatre groupes de maladies: hypothyroïdie congénital, fibrose kystique, hémoglobinopathies e la hyperphénylalaninémies. On a eu comme objectif pour cette étude, évaluer l´implantation d´un

abécédaire éducatif sur le test du dépistage néonatal comme instrument d´éducation en santé pour des mères. Le lieu choisi a été L´Hôpital Universitaire Ana Bezerra (HUAB), localisé à la commune de Santa Cruz, dans L´État de Rio Grande do Norte, dans la Région Nordest du Brésil. L´institution a été choisie par le développement de cette pratique professionnelle et parce que c´est un hôpital de référence à une population de bas revenu et bas niveau éducationel il faut un investissement dans la promotion de la santé. La collecte des données a été réalisée avec 40 mères à l´ HUAB, aux mois de mars à juin 2008. De ces 40 mères interviewées, 20 n´ont été orientées sur ce que c´est le test de dépistage néonatal que verbalement et 20, ailleurs l´orientation verbale ont reçu l´abécédaire et ont eu l´opportunité de le manipuler chez elles. Ainsi, on a évidencé que la plupart de mères qui ont reçu l´abécédaire a présenté une meilleure compréhension sur ce que c´était le test et son importance. Les résultats ont éprouvé que l´abécédaire éducatif a perfectionné la compréhension des interviewées par rapport à cette pratique et on peut affirmer, qu´avec cette recherche, l´abécédare élaboré a accompli son rôle comme instrument d´éducation en santé et avec cela on espère que l´institution étudiée adopte la même comme stratégie pédagogique pour l´éducation en santé dans la population de la commune.

MOTS-CLÉS: Éducation en santé; Infirmerie, Santé de l´enfant.

CARTILLA EDUCATIVA EN LA ORIENTACIÓN MATERNA A LO TESTE DEL PIE

RESUMEN

El teste del pie es una estrategia criada para el diagnóstico precoz de yerros del metabolismo antes que los síntomas se vuelvan evidentes, permitiendo el tratamiento precoz específico y la disminución o eliminación de las secuelas asociadas a cada enfermedad. En la actualidad, este teste puede diagnosticar por el sistema privado, aproximadamente 30 enfermedades metabólicas y por el público (dependiendo del estado), cuatro grupos de enfermedades: hipotireoidismo congénito, fibrose cística, hemoglobinopatias y a hiperfenilalaninemias. Se tuvo como objetivo para este estudio, evaluar la implantación de una cartilla educativa sobre el teste del pie como instrumento de educación en salud para madres. El local escogido fue el Hospital Universitario Ana Bezerra (HUAB), localizado en el municipio de Santa Cruz, en el Estado de Rio Grande do Norte, en la Región Nordeste de Brasil. La institución fue escogida por el desarrollo de esa práctica profesional y por ser un hospital de referencia con una población de baja renta y bajo nivel educacional haciéndose necesario una inversión en la promoción de la salud. La colecta de datos fue realizada con 40 madres en el HUAB, en los meses de marzo a junio de 2008. De estas 40 madres entrevistadas, 20 fueron orientadas sobre lo que es lo tes te del pie apenas oralmente y 20 allende la orientación verbal recibieron la cartilla y tuvieron la oportunidad de manosearlas en su domicilio. Así, quedando evidenciado que la mayoría de las madres que recibieron la cartilla presentó mejor comprensión sobre lo que era el teste y cual su importancia. Los resultados comprobaron que la cartilla educativa perfeccionó la comprensión de las entrevistadas con relación a esa práctica pudiéndose afirmar con esta pesquisa, que la cartilla elaborada cumplió su papel como instrumento de educación en salud, y, con eso se espera que la institución estudiada adopte la misma como estrategia pedagógica para educación en salud en la población del municipio.

PALABRAS LLAVE: Educación en salud; Enfermería, Salud del niño.

CARTILHA EDUCATIVA NA ORIENTAÇÃO MATERNA AO TESTE DO PEZINHO

RESUMO

O teste do pezinho é uma estratégia empregada para o diagnóstico precoce de erros do metabolismo antes que os sintomas se tornem evidentes, permitindo o tratamento precoce específico e a diminuição ou eliminação das seqüelas associadas a cada doença. Na atualidade, este teste pode diagnosticar pelo sistema privado, aproximadamente 30 doenças metabólicas e pelo público (dependendo do estado), quatro grupos de doenças: hipotireoidismo congênito, fibrose cística, hemoglobinopatias e a hiperfenilalaninemias. Teve-se como objetivo para este estudo, avaliar a implantação de uma cartilha educativa sobre o teste do pezinho como instrumento de educação em saúde para mães. O local escolhido foi o Hospital Universitário Ana Bezerra (HUAB), localizado no município de Santa Cruz, no Estado do Rio Grande do Norte, na Região Nordeste do Brasil. A instituição foi escolhida pelo desenvolvimento dessa prática profissional e por ser um hospital de referência a uma população de baixa renda e baixo nível educacional fazendo-se necessário um investimento na promoção a saúde. A coleta de dados foi realizada com 40 mães no HUAB, nos meses de março a junho de 2008. Destas 40 mães entrevistadas, 20 foram orientadas sobre o que é o teste do pezinho apenas verbalmente e 20 além da orientação verbal receberam a cartilha e tiveram a oportunidade de manuseá-las em seu domicílio. Assim, ficando evidenciado que a maioria das mães que receberam a cartilha apresentou melhor compreensão sobre o que era o teste e qual sua importância. Os resultados comprovaram que a cartilha educativa aprimorou a compreensão das entrevistadas em relação a essa prática podendo-se afirmar com esta pesquisa, que a cartilha elaborada cumpriu seu papel como instrumento de educação em saúde, e, com isso espera-se que a instituição estudada adote a mesma como estratégia pedagógica para educação em saúde na população do município.

PALAVRAS CHAVE: Educação em saúde; Enfermagem, Saúde da criança.

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