FEASIBILITY STUDY: Establishing Options for Achieving Access to the Homes of Migrants in Berlin and Gathering Data Referring to Existing Risks for their Children posed by Chemical Consumer Products in their Domestic Environment

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Results

The feasibility study was performed from October 2011 to March 2012 in a central urban district (Neukölln) of Berlin. To avoid any possible influence, the interviews were carried out in the context of medical examinations offered at the premises of the Jugendgesundheitszentrum Berlin-Neukölln (youth health service by the Berlin Senate). Regarding its infrastructure, social and housing conditions, Berlin-Neukölln is a traditional migrant district. Due to immigration in the early 1960s, the major share of migrants is of Turkish origin, followed by people from Arabian countries (see Tab. 1).

Parents were asked to participate in the study on a voluntary basis. They were given initial information and had sufficient time to decide on the study participation. The interviews were conducted, based on the feasibility study questionnaire (see Fig. 2) in German, for a first trial.

General data:
The language barrier, if any, could be bridged by German-speaking relatives, friends of the family or, in rare cases, by translators. The questionnaire tool was additionally illustrated by pictures with keywords translated into Turkish, Polish, Russian and Serbo-Croatian (see Fig. 2).

In 28 cases, the interview was conducted only with the mother, in 5 cases, with the father, and in 11 cases, with both mother and father (family status: married couples, single parents or parents with children). Among the 44 interview partners, there were only 4 parents who had been involved in cases of childhood poisoning.

Knowledge about chemical products and their risks:
The vast majority of the parents were aware of chemical household products constituting a potential hazard. Interestingly, they knew special risks such as corrosive burns, poisoning, sticking due to certain glues, and organ impairment (e.g. liver) etc. In more than a third of the interviews, the differences between corrosive (chemical) and thermal burns were known. It was most interesting to find that many people with a migrant background were well informed about the group of products (household chemicals, drugs, hobby/do-it-yourself products, tobacco/alcohol, pesticides, plants and cosmetics) which may cause poisoning or corrosive burns in children.

Respondents assumed a "very high risk" to be associated with pesticides (ca. 86%), hobby/do-it-yourself products (ca. 83%), drugs (ca. 78%), tobacco/alcohol (ca. 67%), cosmetics (ca. 38%) and plants (ca. 38%). A "very low risk" was assumed to be associated with the above agents in reverse order of the "very high risk" results.

A highly interesting aspect was seen in findings regarding the understanding of risk-related labelling: The symbol “Corrosive” (ca. 39% correct answers) was really commonly known. The symbols “Explosive” and “Toxic”, respectively, were familiar to about 21%. All other risk labels were identified by a low number of respondents (symbol “Highly Toxic”, ca. 26%, all others 18% and below). These findings have clearly demonstrated a new fact assumed to also apply to non-migrants: Risk labelling appropriate for "industrial" use is insufficient for non-industrial users. Presumably, the new Globally Harmonized System (GHS) adopted by the European Classification and Labelling (CLP) Regulation in 2009 will encounter similar problems as the existing one in terms of early warnings and indication of chemical risks for the general public. In this respect, communication and improvement is needed.

Household product storage and safety aspects:

Nearly all groups of agents were part of the household domain: The vast majority of products were of German origin and had been bought in people’s neighbourhood. A particular focus of the study was that of storage and safekeeping of the different products. In this regard, the study provides a lot of data that should undergo a more detailed analysis from many different aspects.

This study among Berlin migrants found that the consumer products were stored in different rooms in the domestic environment (bedroom, bathroom, kitchen, living room, children’s room, lumber room etc. and balcony/garden). In the majority of cases, the products were stored in kitchens and bathrooms, mostly in cupboards assumed to be “out of the reach of children”, and to have “child-proof closures”. Such findings should, however, be validated in as many cases as possible by means of home visits because in this respect, a questionnaire interview is not an appropriate instrument.

General differences between migrants and non-migrants:

Regarding the cases of childhood poisoning accidents, the study did not support the assumption of a higher rate of relevant accidents in families with a migrant background. On the contrary, accidents occurred mainly in families with minor chemical use. There was no obvious correlation between the age of the parents and the interview results. In the majority of cases, the products were stored in kitchens and bathrooms, mostly in cupboards assumed to be “out of the reach of children” and to have “child-proof closures”. Such findings should, however, be validated in as many cases as possible by means of home visits because this respect, a questionnaire interview is not an appropriate instrument.

General differences between migrants and non-migrants:

In order to develop adequate means of prevention of childhood poisoning, the focus should be on the poisoning risks for special target groups such as migrants and the adequate evaluation of specific information. For risk identification and prevention, it is of special importance to find personal access to migrants on a national level. A promising approach may consist in a combination of legal and educationally oriented measures, which should be developed in cooperation with the target groups.

References:
1) Kröger, Gesa: Migrant families meeting organized by the BAG (alle of Born and Bellet) to improve information about poisoning risks in children
2) Method

Existing data on migration background were evaluated regarding the risk of chemical consumer products being responsible for domestic poisoning accidents in children. The main instrument was a semi-standardized questionnaire for parents (see Fig. 2).

The subject matter focused on poisoning accidents which had occurred, knowledge about chemical products being responsible for domestic poisoning accidents in children. The main instrument was a semi-standardized questionnaire for parents (see Fig. 2).

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Fig. 1: Migrant families meeting organized by the BAG (alle of Born and Bellet) to improve information about poisoning risks in children

Table 5: Migrant inhabitants of Berlin-Neukölln in order of main groups of nationality (Status 31. December 2012)

<table>
<thead>
<tr>
<th>Country of Origin</th>
<th>Number (People)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turkey</td>
<td>36,952</td>
</tr>
<tr>
<td>Arabian Countries</td>
<td>20,939</td>
</tr>
<tr>
<td>Poland</td>
<td>14,208</td>
</tr>
<tr>
<td>Former Yugoslav</td>
<td>12,975</td>
</tr>
<tr>
<td>Former Soviet Union</td>
<td>5,058</td>
</tr>
</tbody>
</table>

Fig. 1: Migrant inhabitants of Berlin-Neukölln in order of main groups of nationality (Status: 31. December 2012)}

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