

The *Baby Check* booklet did not affect frequency of health service use in infants ≤ 6 months of age

Thomson H, Ross S, Wilson P, McConnachie A, Watson R. Randomised controlled trial of effect of *Baby Check* on use of health services in first 6 months of life. *BMJ*. 1999 Jun 26;318:1740-4.

QUESTION

In mothers with infants ≤ 6 months of age, does the distribution of the booklet *Baby Check* (an illness scoring system) affect their use of health services?

DESIGN

Randomized (allocation not concealed*), blinded (practitioners)*, controlled trial with 6-month follow-up.

SETTING

13 practices (53 general practitioners, 4400 to 11 000 patients per practice) in southeastern Glasgow, Scotland, UK.

PATIENTS

997 mothers (mean age 29 y, 45% primiparous) who had babies (53% boys, 95% full term) born during a period of 14 months. Participants were excluded if physicians thought that mothers or babies were too sick for inclusion or if mothers did not speak English. Only the first child of a multiple birth was included. Follow-up was 94%.

INTERVENTION

After stratification by practice, participants were allocated to the *Baby Check*

group ($n = 497$) or a control group ($n = 500$). All mothers received a copy of an accident prevention leaflet (*Play It Safe*), and mothers in the intervention group received a copy of the booklet *Baby Check*, which includes information about how to use the *Baby Check* illness scoring system and when to consult a physician or health visitor.

MAIN OUTCOME MEASURE

Consultations with physicians were assessed by reviewing general practice notes.

MAIN RESULTS

No differences existed between groups for the use of primary care services ($P > 0.2$) (Table). The study had 80% power to detect a 10% relative difference at a 5% level of significance. For both groups, 2 general

practice consultations was the median rate during the first 6 months of life.

CONCLUSION

In mothers with infants ≤ 6 months of age, the distribution of the booklet *Baby Check* did not affect frequency of use of health services.

Source of funding: Chief Scientist Office of the Scottish Office Department of Health.

For correspondence: Dr. H. Thomson, MRC Social and Public Health Sciences Unit, 4 Lilybank Gardens, Glasgow G12 8RZ, Scotland, UK. FAX 44-131-650-2681. ■

*See Glossary.

Baby Check booklet vs no booklet in mothers with infants ≤ 6 months of age†

Outcomes at 6 mo	<i>Baby Check</i>	Control	RBR (95% CI)	NNH
0 consultations	17%	19%	11% (-17 to 32)	Not significant
RRI (CI)				
≥ 5 consultations	22%	19%	17% (-9 to 52)	Not significant

†RBR = relative benefit reduction. Other abbreviations defined in Glossary; RRI, NNH, and CI calculated from data in article.

COMMENTARY

Deciding whether an infant is mildly or seriously ill can be difficult. *Baby Check* was developed to help parents and physicians assess the severity of acute illness in infants by scoring 19 symptoms and signs and to empower parents to get help for ill babies (1-4). It gives advice on whether an infant needs to be seen by a physician but does not give a diagnosis or management plan.

Thomson and colleagues did not educate mothers on how to use the list. The study assessed the use of health services and showed no difference between the groups.

We know little about why mothers consult a physician. This interesting study shows that most consultations for infants are for minor illnesses. This does not shed light on whether *Baby Check* would have empowered mothers of severely ill infants to obtain urgent and appropriate medical care. It also leaves many questions unanswered. Did the mothers who received *Baby Check* read and use it? Did they use it correctly? Did they think it helped them assess their babies' illnesses? Were the mothers' scores a true reflection of their babies' illnesses? Did the physicians think the mothers' concerns were appropriate?

Reports of the physicians' diagnoses and prescriptions are not relevant to whether *Baby Check* helped the mother assess her infant's illness. These only indicate the physicians opinion and not the

accuracy of *Baby Check*. Studies have shown that physicians also have difficulty assessing severity of illness in infancy.

The trial by Thomson and colleagues assures us that mailing *Baby Check* does not alter the overall frequency of consultations. However, the question that really needs to be answered is whether the use of *Baby Check* by mothers and doctors means that seriously ill infants are recognized and treated earlier.

Colin Morley, MA, DCH, MD
Royal Women's Hospital
Carlton, Victoria, Australia

References

- Morley CJ, Thornton AJ, Cole TJ, Hewson PH, Fowler MA. *Baby Check*: a scoring system to grade the severity of acute systemic illness in babies under 6 months old. *Arch Dis Child*. 1991;66:100-5.
- Morley CJ, Thornton AJ, Green SJ, Cole TJ. Field trials of the *Baby Check* score card in general practice. *Arch Dis Child*. 1991;66:111-4.
- Thornton AJ, Morley CJ, Cole TJ, et al. Field trials of the *Baby Check* score card in hospital. *Arch Dis Child*. 1991;66:115-20.
- Thornton AJ, Morley CJ, Green SJ, et al. Field trials of the *Baby Check* score card: mothers scoring their babies at home. *Arch Dis Child*. 1991;66:106-10.