

# Challenges for a future reintegration programme in Somalia: outcomes of an assessment on drug abuse, psychological distress and preferences for reintegration assistance

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*Based on an assessment of over 8000 active militia members and military staff in seven regions of Somalia, this article reports on three groups of respondents who might require special attention in a future Somali disarmament, demobilization and reintegration (DDR) programme. The assessment revealed distinct preferences concerning future reintegration assistance, according to region, age and gender of the respondents. In the south of Somalia, a large number of young respondents want to return to formal schooling, but they are especially burdened by war related trauma and exhibit elevated patterns of drug use. Many of the older respondents in the north of Somalia and female respondents throughout of the country, prefer monetary support from a future reintegration programme. This group might not have realistic expectations about demobilization and the existing modules of reintegration assistance might not meet their specific needs. A third group consisted of respondents with a prior psychological breakdown which had disrupted their every day functioning and who might be at high risk to develop severe psychiatric disorders in the future, as demonstrated in a previous study. The findings suggest that, for planning and implementation of a DDR programme, variables such as the expectations, drug*

*use and the psychological stress of individual ex-combatants need to be taken into account.*

**Keywords:** DDR, demobilization, disarmament, reintegration, ex-combatants, micro level data, Somalia, *khat*, post traumatic stress syndrome (PTSD), individual expectations

## **Background**

Somalia is one of today's most prominent examples of a "failed state" (Gros, 1996), where after the fall of Siad Barre's dictatorship in 1991, the former allied rebel groups split off and initiated a civil war. This resulted in a humanitarian catastrophe, with hundreds of thousands of deaths (Arbeitsgemeinschaft Kriegsursachenforschung (AKUF), 2003), and millions of refugees and Internally Displaced People (IDP) (UNHCR, 2005). While the very recent upsurge of violence may hinder the peaceful development of the country, the reinstallation of a national government still nourishes new hopes for the peace process. It is estimated that in the country as a whole, over 50 000 militia are currently armed (World Bank, 2005). Their sustainable reintegration into civil society will

be a major challenge in the course of the peace process. In this article, we want to draw attention to the distinct expectations and needs of the men and women comprising the armed groups in Somalia who will possibly be enrolled in a future disarmament, demobilization and reintegration (DDR) programme. With reference to our previous studies and a large survey among former and active combatants, we identify distinct subgroups in different parts of the country, characterize them by sociodemographic and psychological variables like expectations, drug use or mental problems, and suggest measures for the planning and implementation of reintegration assistance.

### **The case for micro level data in reintegration programmes**

For various reasons, the reintegration phase of DDR programmes is considered the most difficult step (Collier, Elliott, Hegre, Hoeffler, Reynal-Querol, & Sambanis, 2003; Mogapi, 2004) and, as such, the balance sheet reveals successes and failures (Brzoska, 1999). While evaluation of DDR programmes usually focuses on macro level and programme related outcomes (Colletta, Kostner & Wiederhofer, 1996), several researchers demonstrated recently the predictive power of micro level data for the reintegration success of former combatants. Relevant characteristics of subgroups and individuals are, for example, the abusiveness of the ex-combatant's former civil war faction (Weinstein & Humphreys, 2005), or the level of education (Ayalew & Dercon, 2000). In our 2002 household survey in Hargeisa, about seven years after the last civil-war-like violent outbreak in Somaliland, we found 16% of ex-combatants continuously unable to participate in income generating activities due to severe mental problems (Odenwald, Neuner, Schauer, Elbert, Catani, Lingenfelder, Hinkel, Häfner & Rockstroh,

2005)<sup>1</sup>. We explained this high number with the very frequently observed excessive *khat* use among former combatants, which is known to be related to the development of psychotic symptoms (Odenwald, 2007). The leaves of the *khat* shrub, which contain the amphetamine-like cathinone, are traditionally chewed in African and Arab countries. In recent decades, the economic importance and consumption of *khat* leaves have increased dramatically while individual use patterns have undergone profound changes, from socially regulated to uncontrolled consumption (Odenwald, 2007). In Somalia, the *khat* trade is reportedly among the means of income for civil war factions, and combatants are frequently supplied with the drug by their leaders (UN, 2003).

The high number of ex-combatants being unable to reintegrate into productive civilian life due to variations on the micro level might considerably reduce the economic dividends from the reintegration of former combatants to the whole country. Thus, empirical research and evaluation within DDR programmes should focus on the identification of variables on this level, which are predictors or risk factors for successful reintegration, and how reintegration programmes can modify them.

### **Empirical assessment of micro level data in Somalia**

In order to prepare for future DDR activities and to identify groups who deserve special attention, in the second half of 2003, a survey was carried out among active militia members in seven regions of Somalia (Deutsche Gesellschaft für Technische Zusammenarbeit (German Technical Cooperation) GTZ IS, 2003)<sup>2</sup>.

*Sampling and participants.* Sampling involved a three-stage process. In a first step, the seven regions were selected through expert rating

in order to include the regions with the highest militia density. In order to set up the proposed cantonment phase according to the recommendations of the Somali National Reconciliation Conference (SNRC) at Mbaghati, Nairobi, the regions chosen were where most of the encampment areas (87%) lie. These regions also included the major population and economic centres of the country, as well as important rural areas<sup>3</sup>. In each region, interviews were conducted with all factions who collaborated. A minimum of one *entire* unit within the overall structure was completely assessed, whereby militia leaders decided which unit was chosen. Of the major factions, all but one collaborated with the research project.

In the third step, all members of the appointed military/militia units were approached and asked to participate in the interviews.<sup>4</sup>

Strict random sampling in a survey concerning the very sensitive issue of demobilization in Somalia was not feasible. A detailed description of the sampling strategy is provided by Odenwald, Hinkel, Schauer, Neuner, Schauer, Elbert & Rockstroh, (submitted).

In total, 8723 militiamen and security staff were interviewed. The analysis included 8124 interviews of respondents (93,1%), who had given their consent to be interviewed and who fulfilled minimal standards (a minimum of 10 interviews per interviewer; forms completed). The survey included less than 50% of all armed staff in Somaliland and about 8% of the total estimated number of armed personnel in the rest of Somalia. Of these, 4070 belonged to regional authorities in Somaliland and Puntland, 2290 to warlord militia, 1090 to freelance and clan-based militia, 481 to Sharia court militias and 78 to business militias. Sociodemographic data are presented in Table 1.

*The interviews.* Political leaders gave permission to participate in the study during political consultations. Local interviewer teams contacted the commanders of the selected units and appointments for interviews were made. Commanders were asked to inform their unit members beforehand about the assessment. In other words, to report that the interviews were part of a preparatory activity for a future DDR programme agreed on by their faction leaders. On the appointed day, interviewers went directly into the compound used by the respective military/militia units to conduct the individual interviews. Interviews were conducted in a place that provided as much privacy as possible, such as in a separate room. Interviewers informed participants before the interview about the purpose and method of the interview, about confidentiality and about the voluntary nature of the interview. Finally, all participants were given an opportunity to ask questions. The interviewee gave consent orally before the interviews were conducted.

*Instruments.* The questionnaire used in the assessment was designed as a comprehensive and standardized instrument. Questions and closed answers were developed in English and translated into the Somali language according to international standards (independent back-translation). This was done by an interdisciplinary team consisting of Somali and international experts on demobilization and mental health, health and gender. The information assessed comprised basic, sociodemographic variables, health status, preferences in an eventual future reintegration programme, and indicators of psychological distress.

*Preference for reintegration assistance.* We asked each respondent to choose two types of reintegration assistance modules out of a pre-defined list, which was explained to him/her

**Table 1. Sociodemographic information on 8124 active armed forces and militia staff in seven regions of Somalia**

	Corrected Total <sup>1</sup>	Somaliland (3903)	Puntland (854)	Hiran (696)	Bay (604)	Mogadishu North (654)	Mogadishu South (814)	Kismayo (599)	P (test statistic)
Age <sup>2</sup>	34,5 (4,9)	41,3 (12,6)	37,1 (12,8)	39,6 (12,5)	30,5 (9,2)	29,1 (9,3)	30,3 (8,7)	34,1 (12,6)	< 0,001 (211,7) <sup>3</sup>
% male	93,3 (5,8)	82,8	89,9	97,7	97,5	96,3	98,5	90,5	< 0,001 (370,2) <sup>4</sup>
% married or widowed	63,3 (10,8)	73,4	76,8	71,0	63,1	52,0	49,1	57,9	< 0,001 (597,0) <sup>4</sup>
Number of dependants <sup>2</sup>	5,9 (2,0)	6,8 (5,6)	9,2 (6,1)	7,2 (5,5)	4,8 (5,1)	3,4 (4,5)	4,3 (4,9)	5,5 (5,5)	< 0,001 (127,4) <sup>3</sup>
% primary education completed	41,1 (13,5)	49,2	38,8	34,1	32,4	22,1	48,4	63,0	< 0,001 (335,0) <sup>4</sup>
% with any vocational training	22,0 (13,6)	24,7	44,5	17,7	7,1	12,7	12,4	35,2	< 0,001 (460,5) <sup>4</sup>
% with combat experience	75,0 (22,3)	48,4	82,1	84,1	100,0	70,2	96,9	43,1	< 0,001 (1516,0) <sup>4</sup>

P values indicate statistical significance of regional differences. <sup>1</sup> Expected value (standard error of mean), corrected for sample size. <sup>2</sup> Mean (standard deviation). <sup>3</sup> ANOVA, df = 6. <sup>4</sup> 2 × 7 Chi<sup>2</sup> test, df = 6.

by the interviewer; a first and a second preference. The list contained: (1) return to formal education (schooling, university), (2) public works (occupation in labour intensive work programmes), (3) a job in the private security sector, (4) a grant in order to build up a new or expand an already existing small or micro enterprise (SME), (5) rural integration as herder or farmer, (6) training on the job in private companies, who collaborate with the DRP, (7) participation in a vocational training course in order to acquire specific skills (electrical engineering, auto mechanics, metal work, carpentry, masonry, handcrafts, coastal fishing, other vocational training), (8) other form of assistance wished, and (9) no reintegration assistance.

*Psychological problems and war related trauma.* We tried to identify respondents with a history of psychological problems, by asking whether they had ever experienced a period of at least 4 weeks when they could not work because of psychological problems, in a similar way to a previous study (Odenwald et al., 2005). This way of assessing disruption of every day functioning proved to be sensitive to detect severe disorders, such as psychotic disorders. Trauma was assessed by six highly reliable items of the Somali version of the post traumatic diagnostic scale (PDS; Foa, 1995), which we had adapted to the Somali language, culture, and Islamic religion and evaluated in a previous study (Odenwald, Lingenfelder, Schauer, Neuner, Rockstroh, Hinkel & Elbert, submitted). The PDS is a widely used self-report instrument for the assessment of post traumatic stress disorder (PTSD) with good psychometric properties and validity (Foa, Cashman, Jaycox & Perry, 1997; Griffin, Uhlmansiek, Resick & Mechanic, 2004). The six items were also used to assess 'Partial PTSD' (pPTSD). Against the gold standard, PTSD diagnosis by a clinical interview using the Composite Inter-

national Diagnostic Interview (CIDI, World Health Organization, 1997) for pPTSD had a specificity of 0.96 (52 of 54 non-PTSD cases correctly detected) and a sensitivity of 0.55 (6 of 11 PTSD cases correctly detected). In summary, our measure on war related trauma is reliable but produces a systematic underestimation of true PTSD prevalence.

*Interviewers, training and supervision:* Interviewers were staff of local NGOs with interviewing experience (N = 38). Prior to data collection, a 14-day training course was conducted in Hargeisa, Somaliland. The training contained introduction of DDR/DRP and clinical concepts, as well as research design, interviewer training in role-play and field exercises, and preparation for the expected problems in the field. The supervision of interviewers in southern Somalia was realized throughout the assessment phase by satellite phones, radio and field visits by a Somali team member. An intense awareness campaign through the local press, radio and television prepared the ground for, and followed up, the ongoing operation with daily reporting. No security incident was reported during the whole of the assessment period. After the assessment, local nongovernmental organizations (NGOs) handed in the questionnaires at the GTZ<sup>5</sup> office in Hargeisa and assisted in data entry.

*Data analysis:* For each region, we report the uncorrected coefficients for proportions, means and standard deviations. On the level of the total population, we report coefficients corrected for sample size.

## **Empirical findings**

*Drug use:* Based on this survey, we recently estimated the use of six types of psychotropic and narcotic drugs among active and former combatants in Somalia: *khat/miraa*, hashish, psychoactive tablets, alcohol, inhalants, and

*bangi* seeds (Odenwald et al., submitted). According to these estimates, *khat* is the number one drug over all of Somalia. On average, in the week prior to interviews, respondents estimated that *khat* was consumed by 69,5% of their comrades (members of the same unit as respondent), hashish by 18,2%, tablets by 14,4%, alcohol by 8,2%, inhalants by 3% and *bangi* seeds by 1%. There are significant regional differences in relation to perceived drug use: whereas in northern Somalia, *khat* was virtually the only drug being consumed in armed forces units, in southern and central regions, use levels of hashish and tablets reach alarmingly high levels.

*Disability, psychological problems and war related trauma.* About 12% of the respondents reported that they had experienced a serious war related injury at any time. At the time of the interview, over 10% of our sample presented with an obvious physical handicap or impairment, such as a missing limb. Five percent of interviewees reported at least one period of psychological breakdown with the disruption of everyday functioning in

their history. Sixty nine percent of respondents reported at least one typical PTSD symptom: unwanted and intrusive memories of stressful situations, attempts to avoid them, sense of a foreshortened future, elevated jumpiness and sleeping difficulties. Partial PTSD (pPTSD) could be found in 8,1% of the respondents<sup>6</sup>. In order to cope with their war related memories, 29% of the interviewees reported that *khat* consumption helped to 'forget' them.

*Reintegration assistance preferences.* The expectations about, and preferences for, reintegration modules revealed some surprises. The most frequently selected forms of first assistance were: grants for small and micro enterprises (SME) (39%), the return to formal education (28%) and vocational training (13%). As second choice, most frequently vocational training (26%), grants for SME (24%) and rural integration (17%) were selected. Thus, traditionally easy-to-apply tools, like rural integration and employment in the private security sector, were only preferred by a small number of militia members.

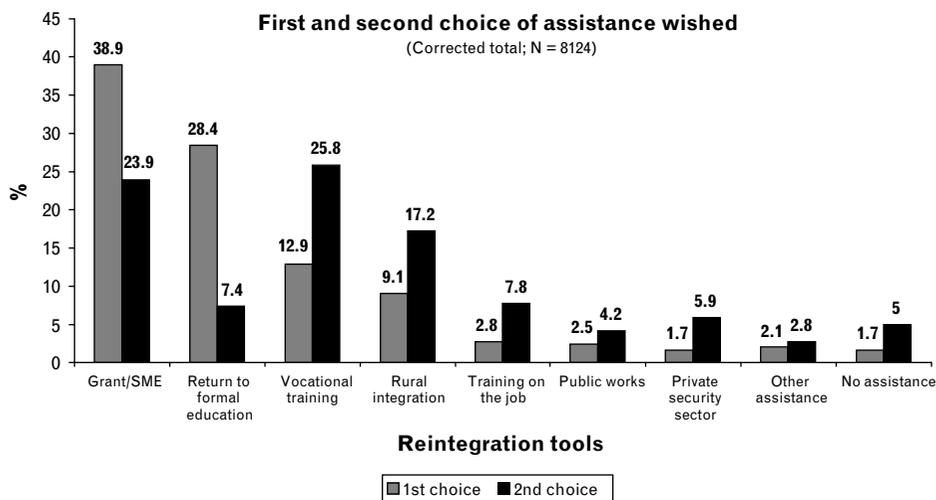


Figure 1: First (grey bars) and second choice (black bars) of reintegration assistance wished by (former) combatants in Somalia. Bars indicate percentages.

There were marked regional differences related to the choices for reintegration assistance. In particular, the number of respondents who selected the options 'grant for SME' and 'return to formal education' as first choice assistance, differed greatly between regions. In the north of Somalia, a high proportion selected the option 'grant for SME' (Somaliland 72%, Puntland 55%), in contrast to the south (Hiran 40%, Bay 9%, Mogadishu, northern part 26%, Mogadishu, southern part 28%, Kismayo 42%), in a total of 4 268 respondents. Among them, 17% were female (n = 726, or 82% of all female respondents), and a large proportion of this group refused to select any form of second choice assistance at all (16%, n = 671 respondents). The preferences for 'return to formal education' (as first choice assistance) were the most frequently selected in some regions of southern Somalia (Bay/Bakool 69%, Mogadishu, northern part 38%, southern part 45%), in contrast to the other regions (Somaliland 4%, Puntland 7%, Hiran 12%, Kismayo 23%).

### **Identification of subgroups with distinct needs**

In DDR programmes, several subgroups of beneficiaries are considered to have specific needs, such as: child soldiers (UNICEF, 2003, Kingma, 2000, Verhey, 2001), persons with disabilities due to physical handicap or psychiatric disorder (Mogapi, 2004, Gear, 2002, Bieber, 2002, Ayalew and Dercon, 2000, Mehreteab, 2002, Ejigu & Gedamu, 1996), or women, who had been part of armies or rebel groups (DeWatteville, 2002). Currently, best practice in DDR requires the inclusion of components for these especially vulnerable groups (Colletta, 2001).

Based on our data from Somalia, we identified three additional subgroups of respondents, who require special attention in

the DDR process. In Table 2, we display the sociodemographic characteristics of these groups.

*Group 1: Unrealistic expectations of monetary support.* Especially in the north of the country, and among the older and the female respondents, a large number of individuals wanted money in the form of a grant for a business (SME). This might be related to the sociodemographic characteristics of these respondents, being generally older than those who selected other reintegration tools, and being more often female, all of who might not find the offered training modules, formal education, or making a new start as herder or farmer to be adequate for them. Especially for women, SME might have been the only reintegration tool they found acceptable. In accordance with the Somali traditional right, and in absence of public social security systems, women frequently *inherit* paid positions of deceased men and become part of the military units. In a few cases, women had been active fighters during the liberation war, but mostly they had assumed other responsibilities within military and militia units, such as cooking or cleaning. Especially in the North of Somalia, a relatively high percentage of women are on the government payroll, and will be part of future demobilization and reintegration programmes. Traditionally, women in Somalia have a weak position, which can be explained by the male dominance within the traditional pastoral society. However, there are remarkable differences regarding women's social position within the country. Officially, it might be denied to women to hold land rights and possess businesses, especially in conservative and fundamentalist segments of the population. However, especially in economic centres, women are frequently economically active, as petty traders and shop owners, or in cooperatives, since they simply have to

**Table 2 Characteristics of three groups who deserve special attention in a future Somali DDR program**

	Group 1: Unrealistic expectations (4083)	Group 2: Formal education and reintegration failure (1421)	Group 3: Vulnerable to severe mental disorders (322)
Expectation towards reintegration	SME	Formal education	Diverse
Region	Mostly North	Mostly South	All the country
Age	40,6 (12,8)	28,4 (7,9)	35,6 (11,4)
% female	17,6	2,0	4,0
% single	13,7	43,9	39,1
Dependants	7,2 (5,6)	3,3 (4,3)	4,6 (5,0)
% primary education	46,0	43,3	38,1
% any vocational training	25,8	12,4	18,9
% pPTSD	2,8	7,2	34,8
Number of trauma symptoms	0,9 (1,3)	1,9 (1,5)	3,4 (1,6)
% Paranoia	3,2	6,5	15,2
% self-reported <i>khat</i> use last week	27,3	56,3	52,2
Quantity of self-reported <i>khat</i> use per week (users only)	8,7 (11,5)	10,4 (10,3)	10,0 (12,0)
% excessive <i>khat</i> use among chewers (>2 bundles/day) last week	24,3	52,9	47,5
% self-medication	9,9	38,0	54,0
<i>Khat</i> in units last week	70,4 (23,2)	72,2 (22,0)	62,1 (31,0)
Hashish in units last week	5,9 (15,6)	21,4 (23,4)	15,8 (23,9)
Tablets in units last week	4,5 (12,7)	18,3 (21,4)	12,5 (20,0)
Alcohol in units last week	3,0 (9,6)	11,6 (17,8)	6,7 (16,0)
% combat exposure	58,0	78,6	76,4
Age of first combat exposure	24,7 (9,0)	19,8 (5,6)	23,0 (9,7)
% severely wounded in war	16,2	9,5	15,8
% physical impairment	18,3	9,9	17,4

earn an income to sustain their families – some with high levels of success. This scenario offers at least some possibilities for reintegration modules for female beneficiaries. The high number of beneficiaries who opted for monetary support probably also reflects

inappropriate expectations concerning a DDR programme, in the sense of seeing it as a chance to simply acquire a large amount of money. In the Somali pilot DRP programme, SME proved to be a relatively expensive reintegration tool, because grants

had to be sufficient enough to enable the building up, or expansion, of a business and individualized solutions with a high need for advisory services. Due to the high costs and the limited number of people fitting the required qualification profile, in future DDR programmes, SME should only be offered to a small number of people who fulfil all preconditions. However, a future Somali DDR programme must also take into account the needs of older and female participants; allocating more resources to the average individual reintegration process in order to allow a greater proportion of respondents to go through an SME tool. Or, it could develop specific offers for this target group, like vocational training for females. At the same time, it has to address unrealistic expectations concerning monetary grants. Unrealistic expectations may lead to difficulties in a future DDR programme, and might even have the potential to threaten the programme's primary goals. In such cases, former combatants feel betrayed or frustrated because they did not get as much money as expected, and they might turn away from the programme, or resort to violence. In light of the fact that only a certain percentage of participants of a larger DDR programme qualifies for the participation in an SME tool, and that a substantial proportion will have to be reintegrated into rural forms of subsistence, the communication and information about the different reintegration modules will have to be very explicit and clear, and must be prepared and supported by a strong information and sensitization campaign. The selection criteria for participants of the SME module should therefore be both strict and transparent to everyone. Simultaneously, the advantages of less 'popular' tools, for older participants, should be highlighted. As criteria for SME, ascertaining whether basic business skills already exist or

can be trained, whether an economically promising business idea can be developed and whether female family members can be included in a responsible position in SME projects will be needed. Experience gained in an SME support activity by the EC/GTZ pilot (GTZ, 2004) projects supports this approach.

*Group 2: Psychological problems and return to formal education.* Especially in the south of the country, a large group of young respondents selected the return to formal education as their first choice of reintegration assistance. Only 30 (2%) among them were female. This group reported high levels of frequent combat exposure, and were on average four years younger than the other combatants at the time of their first combat exposure. Therefore, it was not surprising that they reported trauma symptoms more frequently: 78% compared to 47% in the rest of the sample ( $p < ,001$ ). They were also more likely to qualify for pPTSD. Additionally, they admitted to chewing *khat* more often and to chewing excessively. What is more alarming is that they often reported that *khat* would help them to forget stressful war related experiences. In their units, we also found threefold higher hashish, alcohol and tablet consumption compared to the rest of the sample.

In summary, this group showed alarming characteristics on the micro level that suggest that a large percentage of them might be at risk of failure in any reintegration programme, because of high levels of psychological trauma and drug abuse<sup>7</sup>. Furthermore, we found that drug intake among them often has the function of helping to forget traumatic war experiences (Kulka, Schlenger, Fairbank, Hough, Jordan, Marmar & Weiss, 1990). Self-medication of PTSD symptoms by *khat* use can probably be explained by the alleviation of depression-like symptoms as described for traumatized amphetamine users in western

countries (Brady, Dansky, Sonne & Saladin, 1998). However, in the light of recent studies, which also suggest that the intake of *khat* is related to increased aggressive behaviours (Banjaw, Miczek & Schmidt, 2006), we may expect that the frequent *khat* intake might also lead to more aggressive behaviours among this group (Beckham, Feldman, Kirby, Hertzberg & Moore, 1997). Thus, war related trauma and coping with it by using drugs can, on the one hand, be a starting point for the development of other severe psychiatric disorders, like drug dependency or drug-induced psychotic disorders (Chilcoat & Breslau, 1998). On the other hand, it will also probably be related to behavioural problems during the reintegration phase, such as low self-discipline, low frustration tolerance with related outbursts of anger, or concentration difficulties (Mogapi, 2004). The high percentage of respondents who use more than two bundles<sup>8</sup> per day, and the frequent use of benzodiazepines resemble the typical amphetamine drug abuse pattern found in western countries where, in order to cut down the stimulating effects, users take tranquillizers. The experience from an electrical engineering training activity by an EC/GTZ DRP pilot project in Somaliland (GTZ, 2004) confirms that a number of participants will not be able to follow the course due to these problems. Thus, we strongly suggest that a reintegration programme should consider special preventive, rehabilitative, psychological and medical assistance tools for those who are affected by drug and trauma related problems in order to avoid reintegration failures. The experience from western countries concerning counselling and prevention might be applicable only to a limited extent as the cultural backgrounds differ significantly. Thus, we recommend that a future Somali DDR programme should include

concomitant research activities with the aim to develop, adopt and evaluate trauma and drug related measures.

*Group 3: Respondents at risk of developing chronic mental disorders.* In all DDR programmes, beneficiaries presenting with a disability due to war related injuries or chronic mental disorders have to be expected. Usually, a referral system is recommended, which will give them access to a social security service and, especially for older ex-combatants, a pension scheme is introduced to secure their livelihood as other forms of economic reintegration into civilian society might not be applicable (Colletta et al., 1996). However, at this time, a referral system and public social services are nonexistent. Our findings show that about 5% (321) of the respondents have had a psychological breakdown in the past that led to the disruption of functioning for at least 4 weeks. Fifty percent of them indicated that they experienced their last mental breakdown after the year 2000 (range 1974 – 2003). They did not reveal higher rates of war related physical injuries or impairments. However, they reported a high trauma load, had chewed *khat* very frequently in the previous week, and engaged in self-medication of war related memories by *khat* use. The rate of respondents with paranoid symptoms was more than three times higher among these respondents than among others<sup>9</sup>. The high rate of paranoia and *khat* abuse, which is related to the development of psychotic symptoms, is in line with our study in Hargheisa (Odenwald et al., 2005). This study showed that psychotic disorders are highly frequent among the chronically impaired ex-combatants. This group did not reveal different expectations about reintegration compared to the rest of the sample: 174 selected a grant for SME and 47 choose the return to formal education as their first preference.

Although currently they cannot be considered disabled, they might be at risk of developing severe mental disorders in the course of the difficult adaptation to civil life, and some of them might not be stable enough to participate without medical assistance in standard reintegration tools. Psychiatric research has shown that especially those who were affected in the past are at high risk of developing psychiatric problems in the future. During the conflict, and in immediate post war situation, vulnerable individuals might still be able to function. However, during the course of reintegration, after loss of status and the dashing of hopes and wishes, as well as being confronted with everyday difficulties and resentments in the communities, they might not be able to deal with traumatic memories, and therefore may develop depression and engage more in self-medication by drug abuse. In particular, the chronic abuse of *khat*, with its debilitating behavioural effects (Odenwald, 2007), might constitute a difference to other post-conflict countries, although the mechanisms are not well understood. Some time after their demobilization they may still develop a chronic mental condition.

The number (5%) we found in this study is substantially lower than the 16% of ex-combatants with chronic mental disorders who were incapable of participating in income generating activities for years, which we had found in our previous assessment in Somaliland (Odenwald et al., 2005). This discrepancy is in line with what one could expect for a variety of reasons. In our Somaliland study, we used a household survey to identify ex-combatants, a way of sampling, which includes those who dropped out of service because of mental problems. Furthermore, we might not have detected all vulnerable individuals in this assessment, and it is probably impossible to identify all of

them. Where their number is as large as in Somaliland, it would reduce the returns of demobilization substantially. Consequently, a DDR programme should engage in preventive measures, such as education on psychological problems and directions on where to find assistance. As an investment in developmental assistance, a programme should also initiate a follow-up and support structure, like a governmental department of veterans' affairs or health department within a veterans association, where they can access assistance and treatment. In this respect also, concomitant longitudinal research is highly recommended. We would also recommend that a future DDR programme be linked to broader developmental activities, such as the reconstruction of medical services in the country.

## **Discussion and recommendations**

We have reported some of the findings related to expectations and psychological stress among participants in an eventual future Somali DDR programme. These findings highlight special considerations that should be given to certain groups. Among them, a group of older and female respondents with unrealistically high expectations about a DDR programme, especially related to monetary grants. We see the danger that they might not find it easy to participate in other standard reintegration modules, and that they may feel easily frustrated in the course of DDR. Secondly, a group of young respondents, especially in the south of Somalia, want to continue their formal education in the course of reintegration into civilian society but who display high levels of war related trauma and abuse of drugs including *khat*. They are at risk of developing behavioural problems in the course of reintegration, such as low frustration tolerance

and aggression, low discipline and addictive behaviours, which all lead to increased risk of reintegration failure. Lastly, a number of beneficiaries are at risk of developing severe psychological disturbances in the course of reintegration into civil society, especially as some of them have already experienced one or more episodes of psychological breakdown in the past.

With respect to ex-combatants who are disabled due to physical handicap or chronic psychological problems, factions might use a DDR programme to get rid of the responsibility for them. Possibly this group will not be capable of participating in standard reintegration tools, or may not be able to assume meaningful roles in civil society. However, the exclusive focus on referral systems to public health, social welfare and pension schemes, as realized in other DDR programmes, needs to be avoided from the point of view of sustainability due to limited government budgets. Instead, assistance to their next of kin might be an alternative way to secure their livelihood – especially in the Somali society in which the extended family traditionally takes over the duty of caring for weaker family members. The former EC funded pilot DRP in Somaliland had started to consider these dimensions and has already piloted some modules to offer a variety of trainings and counselling services to caretakers of ex-combatants with chronic disability who, in turn, were committed to caring for them (GTZ, 2004).

Our study has some limitations and the interpretation of single results must be done with caution, especially as we act within a highly sensitive field (Grosse-Kettler, 2004). The self-report data on drug consumption and psychological symptoms is probably biased through a tendency to under report, as our previous experiences in Somaliland (Odenwald et al., submitted) clearly showed.

On the other hand, estimations about drug use in militia/military units might be affected by over rating, as shown in western settings, or by under reporting due to religious norms, etc. The assessment of expectations towards reintegration assistance provided by a future DDR programme is also probably influenced by the high attractiveness of monetary support, so that other less attractive but more realistic tools, are not considered. Although we trained interviewers to explain clearly that participants of the study will not have any advantage in a future DDR programme, we might still have inadvertently raised expectations and influenced responses. In general, the assessment of psychological variables in this context is anything but a trivial undertaking. Furthermore, because of the information policy of collaborating factions we do not know the actual number of armed personnel in the included units. However, due to the fact that all unit members were ordered to see our interviewers, and the low rate of breaking up, due to large numbers and the inclusion of all factions but one, as well as the high motivation to participate in the assessment, we argue that we managed to achieve a representative sample. This is further strengthened by the substantial variation we have in our data showing that our sample isn't a highly selected homogeneous subgroup. Lastly, due to security reasons and other restrictions, it was not possible to supervise and support interviewers on a daily basis during the assessment. Yet, the fact that several hundred respondents admitted that alcohol intake would exist in their locality indicates the authenticity of the responses.

Future studies need to assess, in parallel, the validity of any kind of data gathered by using an objective criterion (such as urine drug screening or by validation interviews) at least in a subsample of respondents. Controlled

longitudinal studies – the only way to identify predictors and risk factors for successful reintegration on the micro level – are especially needed.

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<sup>1</sup> In Somalia, most people in need of mental health services do not have access to them. The public health sector in Somalia is understaffed and poorly equipped, although pharmacies sell psychopharmacological drugs, not all drugs are available and the supply might be interrupted. Western trained psychiatrists in private practice work in the bigger cities. For average Somalis, this treatment is unaffordable, though. Instead, patients and caretakers turn to traditional healers and sheiks (Islamic healers) in their communities for help and assistance. However, for this assistance families also have to pay. Often caretakers are left alone with their psychologically disturbed family members. In order to avoid harm to others, families often chain-up patients to avoid compensation payments to those harmed.

<sup>2</sup> The survey was supported by the Disarmament and Demobilization Committee (Committee 2) of the Somali National Reconciliation Conference in Mbaghati, Nairobi.

<sup>3</sup> In the north of Somalia, Somaliland and Puntland were selected as both regions have a strong state-like power in the form of regional administrations. In central Somalia, Hiran was chosen and in southern Somalia, Bay/Bakool, Mogadishu and Kismayo. Mogadishu was divided into two parts according to the “green line” which divides the town between the main factions.

<sup>4</sup> In Somaliland, due to the involvement in a different project, a census-like assessment was intended. Thus, we systematically assessed all military units that were indicated by the government of the autonomous region Somaliland (north-west Somalia).

<sup>5</sup> German Technical Cooperation (Deutsche Gesellschaft für Technische Zusammenarbeit).

<sup>6</sup> The reader is advised that not all PTSD symptoms found can be attributed to traumatization during war. We have to expect that there is a substantial pre-war baseline of trauma related psychological problems.

<sup>7</sup> Note that our measure of pPTSD underestimates the true prevalence of PTSD.

<sup>8</sup> Based on results of a Kenyan study (Dhadphale & Omolo, 1988) we define the use of more than two bundles of *khat* per day over a period of at least one week as dangerous.

<sup>9</sup> Note that we assessed only paranoid thinking, a small part of the possible symptom range of psychotic patients. Therefore, we underestimated the true prevalence of psychotic symptoms.

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